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ABSTRACT

This book anthologizes the papers presented and discussed at the 1964 International Reading Association convention, focusing on reading improvement through classroom practice. The book is divided into the following five parts: featured addresses; a discussion of current concerns in reading by leading authorities in the field; papers on 12 aspects of reading instruction, grouped within educational levels; papers that discuss research design, international aspects of reading, and psychological foundations for reading; and reports from meetings cosponsored by the International Reading Association. The following topics are discussed: content reading, classroom organization, basal-reading materials, individualized instruction, reading instruction integrated with language arts, multimedia approaches, clinical aspects of reading, teaching reading to the disadvantaged, developing lifetime reading habits, the role of the library in reading programs, preservice and in-service teacher education, and linguistic approaches to reading instruction. (RL)

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J. ALLEN FIGUREL, *Editor*
*Eastern Michigan University*

# *Improvement of Reading Through Classroom Practice*

International Reading Association
Conference Proceedings
Volume 9, 1964

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THE INTERNATIONAL READING ASSOCIATION came into being January 1, 1956, through the merger of the International Council for the Improvement of Reading Instruction and the National Association for Remedial Teaching. It is a professional organization for individuals and groups who are genuinely concerned with the improvement of reading programs—both developmental and remedial, for children and adults—and with providing adequate guidance in all situations in which reading serves as a vital aid to learning.

The Association publishes two professional journals. *The Reading Teacher,* published eight times a year, October through May, is a publication devoted to all aspects of reading at the elementary school level. The *Journal of Reading,* published six times a year—October, November, January, March, April and May—is concerned with the improvement of reading programs in high schools and at the college and adult levels.

Membership is open to all persons engaged in the teaching or supervision of reading at any school level, to parents, and to other persons interested in the purposes of the Association. Members represent all fifty of the United States and many other nations, such as Australia, Canada, England, Germany, New Zealand and Nigeria.

For complete information about membership in the Association and subscriptions to IRA journals write to Dr. Ralph C. Staiger, Executive Secretary-Treasurer, International Reading Association, P. O. Box 119, Newark, Delaware 19711.

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**Dr. Ralph C. Staiger**
**Executive Secretary-Treasurer**
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## FOREWORD

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WITH THE REALIZATION THAT READING is a key to the vast knowledge which is daily accumulating at an explosive rate has come increased interest in the teaching of reading and related language skills. It seems that our survival and very existence demand that we have the latest information concerning all areas of living. Reading is the most effective way of getting this information. Never in the history of communicative arts has so much attention been given to a subject of the school curriculum. It has drawn the attention of linguists, psycholinguists, psychologists, psychiatrists, ophthalmologists, optometrists, neurophysicians, anthropologists, social workers, government specialists, biophysicists, biochemists, university and college professors, teachers and school administrators, and, of course, a host of lay people. Approximately 5,500 persons, the largest gathering of its kind, representing many of the above groups from many parts of the world convened in Philadelphia, April 29-May 2, 1964, to discuss how to improve the teaching of this vital subject. Their deliberations are recorded in this volume of the PROCEEDINGS of the International Reading Association. Nearly 200 formal papers were prepared by teachers and outstanding authorities in the field.

IMPROVEMENT OF READING THROUGH CLASSROOM PRACTICE is the report of the 1964 Convention. The volume is divided into four parts: Part I contains the Presidential and other featured addresses; Part II, "Current Concerns in Reading," a discussion by leading authorities in the field; Part III, the twelve sequences on different facets of reading instruction from kindergarten through college; Part IV, "Research and Related Areas," reading in other countries, and reports of co-sponsored meetings. It is undoubtedly the most comprehensive and latest source of information on the subject of reading. Many institutions have used earlier volumes as texts in language arts workshops.

The 1964 Convention was the largest ever held by IRA. The number in attendance was almost twice what it was the previous year. It had a number of firsts: the presidential address, the banquet, and the Teacher Idea Exchange. All meetings and activities were well attended—beyond expectations. It seemed that all at once people were realizing what an enormous job was the teaching of reading to millions of American children and to countless children and adults from other parts of the world. Something had to be done about it.

William Penn smiled on us as we enjoyed the friendly, inviting atmosphere of Philadelphia: its schools, hotels, and people in general. Friendly yes . . . even the Reading Railroad Terminal seemed to add its welcome. All in all, it was an enjoyable and instructive week for our members.

Neither this foreword nor the papers presented can transmit to you the spirit and enthusiasm of this very large group of professionals interested in reading. This report will merely give an insight into the vital topics presented and discussed. If it does this, it will have served its purpose.

J. ALLEN FIGUREL
*Editor*

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# PART I FEATURED ADDRESSES

## 1. Presidential Address: Challenge of Change

Nila Banton Smith

FAST MOVING change has plunged us into the most serious problems in the history of mankind, and unexpectedly these problems are flinging out many new challenges to those of us engaged in the teaching of reading. In fact, because of these problems reading suddenly has leapt into a new magnitude.

The key solution most frequently proposed for solving the problems that are currently plaguing humanity is *education* and *reading is basic to education.* Education cannot proceed without reading, hence there is a compelling new objective to increase literacy. This new objective is lifting the horizon of reading far above its established bounds, and revealing vast new frontiers—frontiers of creativity, of responsibility, of obligation and of privilege. The door to an exciting new epoch in the history of reading is not only ajar, it is swinging wide open.

I should like briefly to discuss some of the urgent world problems of today and to point out their immediate implications to you as teachers of reading.

### The Technological Revolution

One of the forces that is violently agitating the complacency of our civilization is a product of modern science—a tremendous spurt in technological developments. The advance of technology is speeding the quantity of production and improving its quality. At the same time it is responsible for a problem that is cutting deep into the lives of millions of people, ruthlessly tearing away the very foundation on which they stand because it is depriving them of jobs, their means of earning a livelihood.

Computers, those almost human mechanisms that can store and retrieve information, process data, make predictions, are tremendous time savers; they are also relentless job replacers. Those of you who live in the United States are just recovering from sending in your income tax returns. Perhaps you are saying "Thank goodness, that's over." Don't be too sure it's over. A computer will snoop through the whole thing and maybe decide that you should be called up for questioning. Heretofore thousands of clerks have wearily pored over the figures of samplings of returns. This year clerks won't have this job. The returns will be scrutinized by a computer. If any of the characteristics of your report indicate that there is something wrong, the computer will type out a set of questions on a printer at 600 lines per minute. These questions will be sent to the tax director in your district who will forward them to you. If you should receive a set of these questions suppress the desire to swat some meticulous, round-shouldered, bespectacled clerk, because the computer, not he, will have been the monster who doubted your accuracy or your veracity. Among other things it is said that the computer plays an excellent game of chess. It may be that this electronic newcomer will even invade our recreational pursuits. Computers will be used in schools as time-savers and as teaching mediums. One experiment has shown that a computer can organize classes in a school in just a few hours, thus saving the principal many weeks of work. (So far as I know, no one has yet asked the computer what the principal should do with this extra time saved, but when such a question is proposed I hope the computer will answer that much of it should be devoted to the supervision of reading.)

The computer, of course, is only one prodigy of advanced technology. Human muscles have suddenly become obsolete. Coal is mined by mechanical devices. Trees in forests are felled by lethal beams. Combination machines on farms do the work formerly required of several men, and tractors drive themselves around the fields. A factory worker who is skilled at running a machine today may find that his machine is being run by another machine tomorrow.

This magic carpet of automation is slipping under our feet so rapidly that it is difficult for us to realize that we shall soon have increased millions of jobless people in the world unless something is done about it immediately. Joblessness is gaining on us in dizzying acceleration. In the United States, for example, the number of jobless in 1953 was [illegible].9 million. In 1962 it rose to 4 million. President Johnson says that by 1970 there will be 22,000,000 fewer jobs than in 1960. These figures are appalling. They clamor for swift action. The jobless must be retrained in the here and now for new and higher types of skills. Otherwise, like the Frankenstein monster, automation may turn on its creators and inflict atrocious retributions.

Closely related to this problem of retraining adults who are losing their jobs there is the task of retraining and initial training of youths.

The time has passed when a youngster can enter a large company as office boy and become president of the organization. Inter-coms, telephones, copy-producing machines do the work now. The talk-write machine may even replace stenographers one of these days. The youngster who delivered groceries in a basket on his bicycle has been replaced with a sleak delivery truck. A boy is no longer needed to sweep out stores in the evening for storekeepers now have vacuum cleaners.

It is beyond boyhood, however, that youth is really distressed. The United States Bureau of Labor statistics reports that among young people under 21, unemployment is twice as high as in the whole population. Yet because of our population explosion by 1966 half of us in the United States will be under 25. This is an age of youth.

In this connection the drop-out problem becomes acutely serious in the United States and it is acutely serious in other countries as well. I am told that in many parts of Africa the drop-out rate is 50 per cent or more. The United States Department of Labor expects 7,500,000 drop-outs this decade, and only 5 per cent of the total available jobs will be of the unskilled type. School drop-outs have twice as high a rate of unemployment as high school graduates. You and I know from experience what studies show with statistics—that an extremely high percentage of these drop-outs are deficient in reading skills.

The United States Government and many communities have recognized the immediacy of this threat to employment and have already extended their appropriations for retraining both adults and youth. Recently many centers have been set up for this purpose, and this is only the beginning of a stupendous mass movement to educate *out-of-school* individuals.

Why have I been discussing this problem of automation with you whose specialization is reading instruction? Simply because this great retraining movement opens up one of the most expansive frontiers to you in the history of civilization. First we provided reading instruction to children in the elementary grades, then to high school students, on to college students, and in a limited way to adults outside of college. Now it suddenly has become mandatory that we teach *millions* of adults and *millions* of youths *out of school* to read better in order that they may hold jobs and lead productive lives. And these people should not be taught with elementary readers nor, for the most part, with present elementary methods. New materials must be prepared for them, new methods must be devised, new skills must be discovered and taught. Old patterns will no longer be suitable. *You* are the chosen ones to make these new contributions. The challenge is urgent. The need is grave. The frontier is wide and beckoning to you. I hope that many of you will respond to these dire reading needs in retraining for employment.

### Poverty

Let's take a look at another problem which has haunted the world from the beginning of time, that of poverty. The Bible says, "Ye shall always have the poor with you." And we always have, and no one has been much concerned about it. At the moment, however, the whole world is just beginning to feel the full impact of words uttered by Aristotle, the great sage of ancient Greece, who said in 347 B.C., "Poverty is the parent of crime and revolution."

While nothing much has been done about relieving poverty throughout the years we have been aware that extreme poverty exists in certain sections of Mexico, South America, India, China, Africa, and other countries. It is only recently, however, very recently, that we are hearing about poverty in the United States. Suddenly we are confronted with this topic on all sides. Why this unexpected onrush of concern about poverty in this country?

The stark, intractable answer is that poverty is simply out of step with American progress, a step-child alien to our national economy. Productivity in the United States is at such a high level that poverty is entirely unnecessary. Congress recently passed a bill whereby farmers who would voluntarily limit their production of wheat and cotton would be subsidized. In an economy in which farmers are paid not to produce these staples of food and clothing, there certainly is no place for poverty. Yet 35,000,000 people in this country fall within the poverty category, and unfortunately a reduction in poverty is not accompanying our rising economy.

So far I have been briefly delineating a broad outline of the poverty situation in the United States. I have reason to believe that similar conditions exist in other countries and in many instances in greater numbers and in more intense degrees than in this country.

What does poverty have to do with reading? Why have I been talking about poverty, instead of discussing phonics, comprehension, study skills or speed? Because the movement to obliterate poverty has an extremely important message for you. There is a definite relationship between the defeat of poverty and the victory of education, and if education is to be victorious these poverty stricken people must be taught to read.

A few of them can read some, others are functional illiterates, others can't read at all. A lean leathery-faced mountaineer who had been unable to get any work for many months since his saw mill shut down stood with his worn child-bearing wife and his pasty-faced, lethargic children and smiled as he said, "I can't read, but I can write my name real good." To him, this was an achievement. To us it is an explanation.

One-fifth of the population in the United States is living in poverty. This means that one-fifth must be better educated. With one-fifth to be taught to read better or to read from the foundation up, heavy new demands will be made upon all reading teachers in the United States. With pressure to provide a better life for people the world over there will be increased demands to teach reading in all countries as the chief medium for helping the indigent to climb out of their abysmal pits of poverty. As Aristotle said, "Poverty is the parent of revolution," and no government wants revolution.

## Integration

All tied in with joblessness and poverty, the United States has the special problem of integration. Among Negroes the jobless rate is approximately double the over-all rate for the entire labor force. In sections of our major cities, as many as 50 per cent or more of Negro young people have been jobless in recent years. In July 1963, 11.2 per cent of the Negro labor force was unemployed, as compared with 5.1 per cent among whites. As for poverty, the Negroes are not as great in numbers as whites, but where poverty does exist among the Negroes it is more intense.

But it is not because of joblessness and poverty alone that we should support the Civil Rights movement in the United States. It is because of the compelling need for us to fulfill a promise. The Emancipation Proclamation held out the promise of liberty, equality, and fraternity. Liberty has been given, but not equality and fraternity. These last two promises have yet to be realized.

We in this group can do much in helping to complete the Emancipation Proclamation in the areas of equality and fraternity. Thousands of non-white adults and youths will come your way for help in reading. If you are white greet these good people warmly, happily, without the slightest tinge of predilection or bias.

Give to them the best that is in you to help them to improve themselves. At times you may wish to entertain this sobering thought—when Africa, India, and China leap into technology in the twentieth century, is it not possible that the white race may awaken some day to find that it is a minority race? This is something to think about.

In our classrooms for school-age children many new problems are arising as a result of integration. These are mostly problems of organization. The new-comer who is colored may not fit into the snug three-group plan. He may not fit into the achievement level of different subjects. He may be better. He may be poorer. If he is having difficulty, reading no doubt will be the basis of this trouble and all of his other difficulties will be accentuated because of his reading deficiency. In such a case perhaps you who are skilled in the teaching of reading may be just the one to dislodge this key log from the jam and thus permit smooth sailing down the stream of achievement for one of America's future citizens—one who some day may not only hold a job, but who some day may make a unique contribution. Believe me, assisting him will be well worth your effort.

## International Relationships

IRA is an international organization so let's quickly leave America's special problem of integration and pass on to broader considerations. Perhaps the most terrifying problems from the universal standpoint are those stemming from interrelationships between nations. Problems of interrelationships will undoubtedly prevail for a long time to come. Today we don't know what we are preparing a child in the schools for. One thing is certain, however—that his life is going to be tied in strongly with the lives of people in other countries. He must be knowledgeable about all parts of the world.

Some folks say that the world is growing smaller. Perhaps it is in so far as mechanized communication and transportation are concerned. In so far as human relationships, aspirations, and longings are involved, it is growing larger every day. All human beings are bound together by one basic drive, the desire of man to improve himself. The revolution of rising aspirations is the revolution that is gnawing at the very grassroots of all of the other revolutions. Man the world over yearns for an easier life, a more secure life, a fuller life, a longer life. He is taking it into his own hands to see that he has such a life. He is finding out that he can stand on his own two feet and reach for the sun. But if he continues to stand on his feet and succeeds in reaching the sun he must have education. Education is the conqueror of power and the harbinger of hope, and reading is the broad base from which education emanates.

During the last ten years the governments of fifty nations have changed, many of them through revolution; some through seizure by a dictatorship. In the face of these unprecedented changes in government school curricula must also change. We need more history. In the United States our high school students have American history, which of course is a must; they have some history of our immediate antecedents and of the Greeks and Romans. They need to have history of Africa, history of Russia, history of the Spanish and the Portuguese, history of South America. I suspect we wouldn't be having as much trouble with our South American neighbors as we are now having if we had a better understanding of their cultures. Students the world over will need to read more history, adults will also, and we as reading specialists need to find still better ways of helping these people not only to read history, but also to interpret history and to evaluate it critically.

Then there is science and math—two subjects which are strongly interrelated. We shall be living in a highly scientific age the world over. Increasing numbers will be trained to work at high level jobs in science and many others will work as their assistants. All of us will be consumers of science. We must know how to *read* science, and probably we have only barely tapped the possibilities of teaching the special skills needed in this area.

In the coming era new reading skills will be needed that we don't know anything about now, such as reading retrieved and stored information which computers may hold in different forms and even in symbols different from those with which we are now familiar. Reading materials necessary in holding the new jobs or resulting from these jobs may be placed in arrangements different from the conventional horizontal lines of print in a book, and again they may make use of many symbols and many skills in addition to and different from those which we now are teaching. New demands in reading will be felt in the entire universe.

In the midst of these needs it is alarming, it is appalling to face the facts in regard to the vast numbers of people in the world who are illiterates. More than one-third of the world's population is illiterate; and in some of the underdeveloped areas close to 90 per cent cannot read or write. In half of the nations of the world the rate of adult illiteracy is 50 per cent or more. These illiterate people are consumed with motivation for a better life. Some fight for freedom. But are they able to handle freedom when they get it? The experiences of peoples in some countries of Africa and South America indicate that they are not. Others do not fight for freedom but are targets for propaganda of those holding out to them false promises of a better political order. Both of these groups need education.

And we are not without illiterates in the United States. According to the last census there were in this country about 3,000,000 illiterates and about 8,000,000 "functional illiterates" over 14 years-of-age. On the whole, these are the ones that are poverty stricken, these are the ones that are jobless.

Our ideal in regard to world relationships would be an entire universe of independent nations under governments of their choice and all cooperating with one another. With a third of the world's population illiterate such hopes are dim, indeed. In the face of this situation I believe that IRA should add a new dimension to its purposes. Up to the present time our major concern has been to improve reading instruction, to enable us to teach reading better in our own situations. Should we not be equally concerned about literacy —the world over?

I suggested adding this aim to our present aims in the Bylaws. The Board approved and directed that this be handed to the Bylaws Committee. Previous to this Dr. Clymer had appointed an Adult Literacy Committee. So beginnings have been made.

What vehicle would be more appropriate to do something about this critical situation than the International Reading Association? Aren't you deeply grateful that "International" is included in the name of our association, that our title affords us the scope of internationalism? An *international* reading organization is desperately needed now, if ever. I wish IRA could take the lead in reducing world illiteracy. Perhaps our IRA councils and members in various parts of the world could organize groups of volunteers to give service to community organizations concerned with the literacy of adults and youths: welfare and church groups, social and service clubs, etc. Perhaps some philanthropic organization or individual might finance some of our trained people to go into pockets of illiteracy, not only in the United States but in other countries, to organize and supervise literacy programs. Maybe we would be able to get a grant from some foundation for this purpose. Because of the deep current interest of the United States Government in reducing world illiteracy, possibly we could get help from some one of the many different agencies concerned, respectively, with manpower, adult education, youth corps, juvenile delinquency, dropouts, etc. I don't know just what machinery might be set up, but in addition to serving our organization's presently stated basic function of improving our own personal, instructional skills, I fervently wish that we might become missionaries dedicated to the terribly urgent need of reducing world illiteracy.

While we might spare a few of our reading specialists for literacy missions where no free agencies of instruction exist, what are we going to do about the thousands of reading teachers that will be needed in the free programs under the sponsorship of the government, of states, of cities, and of communities? Centers offering free training for out-of-school adults and out-of-school youth are being developed rapidly. In addition the move is on to establish community schools providing two years beyond high school to all—free and unselected. No doubt the teaching of reading will be a major need in all of these situations. Who is going to teach reading to these millions?

President Johnson perhaps is pointing to the answer when he says, "Instead of pretending that traditionally trained teachers can do the new and unconventional job alone, they will have to welcome volunteers with a wide variety of backgrounds." This thought is rather heartbreaking to us who have been striving so earnestly for higher standards in regard to teacher education in the field of reading. But this situation is with us. How can we meet it? First by persisting strenuously in our efforts to raise standards for educating reading specialists working with our regular school population at present, so that the accumulation of drop-outs and illiterate adults will not continue to pile up. We must strive for more and better reading courses in colleges. Coincidentally, in-service courses must take on new life and come to closer grips with teachers' needs in meeting the demands of change in their particular situations. Master teachers of reading must be used more widely in helping other teachers. And all of us who are experienced and trained in reading must expect to devote hours and hours to the cause in addition to our regular day's work. We haven't space in school buildings during school hours to accommodate the millions of out-of-school individuals who need to be taught to read. Many of them will be taught in classrooms in late afternoons, evenings, and Saturdays and you who are sophisticated in reading will be called upon to advise and supervise and to give extra courses to these so-called "volunteers with a wide variety of backgrounds," who will be called upon to teach reading to these people. The demands on those of you who know how to teach reading will be extremely heavy, but being IRA people you will *want* to meet these expanding demands; you *will* meet this challenge in so far as your strength will permit.

### Respect for Human Dignity

In this expansion of reading needs, there will be a new diversity in the personnel with whom you'll be working. Your students will represent a much wider range in age, their achievement levels will deviate tremendously from the usual norms, they will come from different cultures, their home environments will vary, the color of their skin may be white, yellow, copper, brown or black.

Regardless of these divergencies, bear in mind always that each individual with whom you work is a human being, that each one merits your respect in keeping with his dignity as a person.

The capacity to understand is perhaps the most basic quality in respecting human dignity. Sometimes for lack of understanding we place a student in a position of disrespect. Their motives are misunderstood. As an example: I recently placed some boxes of old papers by the roadside for the trash man to collect. Shortly after, upon looking out of the window, I saw a youngster about twelve years old, on his knees beside these boxes tossing the papers up in the air every which way—mischief if I ever saw it! In my interpretation this boy certainly was showing every evidence of juvenile delinquency and destructiveness. I stepped to the door and called out, "Hi, there, boy. Get away from those boxes! I can't have papers strewn all along the roadside." He turned facing me with a deplorable look on his countenance. After a moment's silence he said timidly, and with lips trembling, "Can't I please have the folders for my science project? I have a science project that is going to take an awful lot of folders. They're expensive and I can't afford to buy them." At this, I went out and helped him retrieve the remaining old folders and took along a handful of new ones. Together we tossed papers and searched for discarded folders. Together we cleaned up the mess. If I had degraded the human dignity of this boy assuming that he was an embryo juvenile delinquent and had chased him away when he so badly needed the old folders, probably he would have left with a grudge, maybe with a painful scar that might have caused him at another time really to toss the papers for pure mischief. Instead a warm bond of understanding developed between a boy and a teacher. The happiness and enthusiasm which were apparent on this youngster's face as he trudged away with his precious package of folders will, I am quite sure, carry over into successful work in his science project.

I'm afraid too often teachers show disrespect for the human dignity of their students by quickly judging their actions without finding out their motives. These students, whether they are children, youths or adults, are people. They have feelings, and they are hurt when they think the teacher holds them in disrespect. So if one is to be a successful teacher of reading, *now* of all times, he should search for motives and reasons before showing disrespect.

Furthermore, in this period of joblessness, war against poverty, integration, we need to look for other worthy qualities which counterbalance, perhaps overshadow, inability to read. An adult or a child who can't read may have a wonderful character. Don't degrade him in your estimation just because he doesn't happen to possess the skill that you teach.

Every once in a while you hear someone say, "Shucks. They want to be that way. You can't make anything out of them anyhow. They'll never amount to anything." This is a reprehensible attitude to take. They *do* want to improve themselves. Maybe some have become complacent when they thought there was no chance to better themselves, but when they see that there are possibilities of improvement they are eager to take advantage of them.

As for them "amounting to something" in the usual terminology, didn't Lincoln come from a disadvantaged house? How about Schubert, Michelangelo, Horace Mann and Booker T. Washington?

The other day a little colored boy who lived in a shack across the tracks entered an all-white campus school, where most of the children were from the homes of college professors. His entrance was a part of the integration plan. He could read hardly at all, he definitely could not work with the textbooks which the other children of his age were using. He was given the WISC test. One of the questions was, "Why are the women and children saved first in a ship wreck?" This little fellow didn't give the usual answer in terms of physical strength or skill. He didn't say, "Because the men are stronger" or "Because the men can swim." He reached down in depth, right down to bedrock attitudes as he replied, "Because he respec' her even more than he do hisself." What a beautiful thought to come from the disadvantaged little colored boy. He couldn't read. His English was most ungrammatical, but I have never heard a child answer this question in such depth. And what a wonderful concept he had of the devotion of a husband for his wife. This one sentence made you realize that you had something precious here, that this was a child that you wanted to teach, to nurture, and to love.

You never know when you are going to tap deep springs of nobleness, of leadership, of creativity, even of genius in these disadvantaged individuals. Let's raise the level of potentiality for each one of them. Let's keep ourselves continuously alert to the discovery and development of these tremendous human resources, as well as teaching the skill of reading.

To narrow respect for human dignity down to a specific reading situation: Studies repeatedly have shown that most teachers are irritable, impatient, annoyed with the student who isn't doing well in reading. These attitudes on the part of teachers certainly are not conducive to reading success. Such a student is in trouble. His concept of his own human dignity is already at a low ebb. The teacher's poor opinion of him lowers it still further.

In teaching a student who is not doing as well as the others, you should let him know always that you are his friend. He needs your help and support. He needs your respect for him as a human being. Don't be irritable just because he doesn't know the words.

I heard about a gentleman the other day who was terribly mangled in an accident. They took him to a hospital and performed several operations. A couple of days later when the surgeon thought the man could take the news, he came to his bedside and said, "I'm sorry to tell you, sir, but we had to take out one of your eyes. We'll have to give you a glass eye."

The gentleman's head was swathed in bandages. Only one eye and his lips were visible. But he turned his one eye toward the surgeon and with a faint smile on his lips replied, "Well, if I have to have a glass eye, please give me one with a twinkle in it."

This has a message for *you*. When you are just ready to expode because "he" doesn't know the word put in your glass eye with a twinkle in it!

Tolerance, understanding, sympathy—all will be necessary in meeting the challenge of change. These qualities will spring into action spontaneously if we keep ever before us a vision of the contribution which reading has to make in solving the problems of this troubled world.

I find it heartening to read some words penned by Oliver Wendell Holmes, Jr., just before World War I. His premonitions at that time were so accurate that his message is even more appropriate now than it was on the day that he wrote it. Holmes[1] wrote:

"If I am right it will be a slow business for our people to reach rational views, assuming that we are allowed to work peaceably to that end. But as I grow older I grow calm. If I feel what are perhaps an old man's apprehensions, that competition from new races will cut deeper than working men's disputes and will test whether we can hang together and fight; if I fear that we are running through the world's resources at a pace that we cannot keep, I do not lose my hopes. I do not pin my dreams for the future to my country or even to my race. I think it probable that civilization somehow will last as long as I care to look ahead. I think it is not improbable that man, like the grub that prepares a chamber for the winged thing it has never seen but is to be—that man may have cosmic destinies—that he does not understand. And so beyond the vision of battling races and an impoverished earth I catch a dreaming glimpse of peace.

"The other day my dream was pictured to my mind. It was evening. I was walking homeward on Pennsylvania Avenue near the Treasury, and as I looked beyond Sherman's Statue to the west the sky was aflame with streaks of crimson and scarlet from a setting sun. But, like the note of downfall in Wagner's opera, below the sky line there came from little globes the pallid discord of the electric lights. And I thought to myself the Götterdämmerung will end, and from those globes clustered like evil eggs will come the new masters of the sky. It is like the time in which we live. But then I remembered the faith that I partly have expressed, faith in a universe not measured by our fears, a universe that has thought and more than thought inside of it, and as I gazed, after the sunset and above the electric lights there were the stars."

I trust that we, like Oliver Wendell Holmes, can look "beyond the vision of battling races and an impoverished earth" and that we too can "catch a dreaming glimpse of peace." And I hope that we can hold this glimpse before us continuously as we teach reading. The past is prologue. Time passes inexorably, but the future remains for us to shape. With these multitudes to learn the skill of reading we shall need clear vision, dedicated effort, courageous action. We must teach reading more effectually than we have ever before taught it. We must search diligently for better ways of meeting new demands. And withal let us look beyond skill development as a terminal point. Let's lift the veil and envision the tremendous service that reading has to render in helping peoples the world over to enjoy the fruits of living during the remainder of this century, and in all of the centuries to come. And let's share this vision with those to whom we are teaching the precious skill of reading. If we do this, both we and they will be able to look above the crimson and scarlet streaks of sunset, beyond the globes clustered like evil eggs—and there we, too, shall see the stars.

## 2. Teaching One Million Johnnies to Read

JOHN B. KING

THE SUBJECT at hand, *Teaching One Million "Johnnies" to Read,* really breaks down into three phases—the first, we might call "Stock Taking," the second, "Benchmarks of Progress" and third, "A Look Ahead."

The reading problem in New York City is more or less typical of the challenge facing all of the large, complex urban communities throughout our country. Several of the more perplexing aspects of the problem are intensified here by the larger number and greater variety of people moving from the rural areas of our nation and from other lands into our enormous cosmopolitan center. Perhaps the most unusual characteristic of our seething metropolis is the heterogeneity of its eight million people so distributed as to create a city of cities. Its 850 public schools serve the children of the wealthy and of the poor, from the pockets of plenty along the Park Avenues and fringes of our city to the ghettoes and slums that house the poverty stricken twenty per cent of our citizenry. Into the public schools of our city, these children bring, in varying numbers, fifty-eight different language backgrounds and cultures along with the myriad of strengths and weaknesses that our society and economy has willed to them. It is to this vast polyglot, this most variegated heterogeneity that make up our public schools, that we must bring all the educational resources at our command, if these children are to become happy, wholesome, competent, contributing, responsible citizens of our great democracy. It is my sincere belief that, regardless of all other forces at work in our society, the effectiveness of the reading program is the greatest single determinant of their success and ours in achieving the kind of quality education so vital to the good life for the individual and the nation.

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[1] Oliver Wendell Holmes, Jr. *Harvard Alumni Bulletin*, LIV, No. 10 (February, 1952), pp. 424-6.

It was with this basic tenet in mind that we set out in 1960 to upgrade very substantially the teaching of reading in the elementary schools of New York City. The recent integration struggles and war on poverty in the nation and in the city have served to reaffirm and reemphasize our original feeling as to the urgent role of reading instruction in the growth and development both of our educational program and of our society. Our redetermination was born at the time of the frenzy created by the Russian Sputnik and the resultant drive for better education, by the sensation creating angry books attacking reading instruction, by the "Madison Avenue" promotion of so-called new methods, and by the spectacular revelations of research on the preparation of teachers to teach reading. All of these pointed up the need for a thorough reappraisal of our reading program—its assets, its liabilities and its ramifications unique to New York City. Out of this came a greatly intensified campaign, a drive for something more effective than what we had found in our reappraisal. The shibboleth, the watchword, the battlecry of that campaign became, *Teaching Our 600,000 "Johnnies" To Read*. Teachers, supervisors, college personnel, parents, and retired members of the staff rallied to the cause which became one of the most stirring mobilizations of talent and commitment that I have witnessed during almost thirty-seven years of service in our city schools.

Among the touchstones in the emerging program for better reading instruction were seven basic principles or premises:

1. Reading must be viewed in terms of its broader implications, not as an exercise in word-calling, but rather, as an integral part of the thought and communication process, inseparable from the other language arts, and, therefore, an expression of the total personality.
2. The teaching of reading must be anchored to the basic philosophy of our elementary school program which is child-centered rather than subject-centered and which stresses teaching and learning through real, vital, dynamic meaningful experiences. Such learning must be sequential and always appropriate to the way children grow and develop. Teaching for such learning in the elementary schools must be unified and integrated, rooted in the Gestalt rather than behavioristic psychology.
3. Reading must be taught on both the elementary and secondary levels as part of a balanced curriculum provided to meet the total and varied needs, interests, and abilities of all our children. Such a balanced curriculum will change continuously to reflect the ever-changing demands of our democratic society.
4. Major emphasis must be placed on developmental rather than corrective reading on all levels. Reading skills, including phonics, must be developed systematically and sequentially

from the earliest grades. Causes of reading disability are usually multiple and complex and must be identified and corrected as early as possible in the child's school life.

5. The direct route to improvement in reading is through improvement of supervision and instruction. We must, therefore, be committed to utilizing every possible means of improving the pre-service and on-the-job training of our teachers of reading. This means strengthening both the college program and the supervisory program.
6. In developing the reading program, we must utilize to the full, in school and out, the almost limitless rich and varied human and material resources of our great city. Carefully controlled research must be greatly expanded both to measure the effectiveness of methods, new and old, and to measure the effectiveness in utilization of resources, human and material.
7. Resolution of the problems of reading instruction must be undertaken with full recognition of—and appropriate measures to combat—the unique handicaps under which our New York City schools labor.

Now, before going into the specifics of the action program, I should like to refer briefly to some of the major factors that contribute to the low-level of reading achievement among the thousands of culturally disadvantaged children and youth in New York City. This we might think of as "Stock Taking."

1. Staff shortages and rapid staff turn-over. More than 3,000 replacements each year in elementary schools—most of these in minority group areas.
2. Inadequate pre-service and on-the-job training of teachers and supervisors necessary for effective teaching of reading to children difficult to teach.
3. Vast numbers of pupils receiving short-time instruction on all levels with all pupils receiving four hours instruction or less in first year. Approximately thirty thousand pupils on short-time in grades 2-6—largely concentrated in the critical early grades.
4. Excessive school-to-school mobility of pupil population. Many schools about 100 per cent turn-over each year, usually in minority group areas.
5. Tremendous and steady increases of economically and culturally-disadvantaged, under-educated and under-motivated pupils from outside the city. The South, Puerto Rico, and more recently, Cuba and China—shift of middle class to suburbs.
6. Failure to meet the urgent need of many pupils for kindergarten and pre-kindergarten instruction in culturally disadvantaged areas.
7. Unusual distribution of New York City pupils on the normal probability curve of academic ability, i.e., many more pupils in upper and lower academic levels and fewer than normal in the middle group.
8. Extremely varied ethnic and language background which creates many instructional problems in New York City unknown or little known in "homogenized suburbia" where homogeneity is the watchword in school and out. Approximately one out of five pupils in elementary schools is of Puerto Rican background and Negroes comprise almost one-third of the elementary school population.
9. Tens of thousands of illiterate adults from outside, including many school dropouts, and many unemployable parents settle in our city each year. Estimates indicate that there are 500,000 illiterate adults in New York City at any one time, with about 42,000 on the welfare rolls.
10. Unavailability of reading materials oriented to interests and needs of pupils of varying backgrounds in a large urban community.
11. Inadequacy of definitive research on best methods of teaching reading to culturally deprived and reluctant learners on all levels.
12. Ever increasing need for special personnel, clinical, guidance and other services, instructional ma-

terials and techniques for growing numbers of physically, mentally, socially, and emotionally handicapped pupils. Good special education programs inevitably reach more and more children and youth.

13. Special problems related to measuring intelligence, learning potential and reading growth among culturally disadvantaged.
14. Assets and liabilities growing out of current educational trends and practices, e.g., collective bargaining, school integration, team teaching, campus schools, programed instruction, manpower retraining programs conducted by Board of Education, as well as, "outside" agencies and organizations.
15. Problems growing out of budgetary limitations. Operating Budget for 1963-1964 was more than $800,000,000 with the city providing about $566,000,000 and the state about $265,000,000. The per capita allotment in elementary schools is less than $700, and the needs exceed $1000.

Now, let us consider a few "Benchmarks of Progress" in each of six primary spearheads in our action program.

1. TEACHER AND SUPERVISORY GROWTH
   1.1 Pre-Service—
      Reading Academy
      Campus Schools
      Manuals and Teaching Guides being developed jointly by school and college personnel
   1.2 On-the-job Training—
      District and local school programs to promote supervisor and teacher growth
      In-service Courses and TV Workshops
      Bulletins and Teaching Guides, Films
      City-wide exhibits, conferences and workshops
   1.3 Experimentation and Research—
      Team Teaching
      Programed Instruction
      5 hour first year
      Hold-over Study
      S.R.A. materials
      Phono-visual technique
      Initial Teaching Alphabet
      Reading films
2. EXPANSION IN PERSONNEL AND SERVICES
   2.1 Corrective Reading Teachers
   2.2 Reading Improvement Teachers
   2.3 Librarians in elementary schools
   2.4 Specialists in music, science, art, health education in elementary schools will raise teaching skills in other areas and provide time for diagnosis, record keeping, planning and preparing instructional materials.
   2.5 Establishment of After School Study Centers on all levels for remedial work, homework clinic, and school library.
   2.6 Provision of school aides and additional school secretaries to reduce non-teaching chores and allow more time for teachers to teach.
   2.7 Additional reading clinics have been set up to handle special problems.
   2.8 Additional Junior Guidance Classes to care for disturbed children.
   2.9 Additional guidance counselors provided in elementary schools.
   2.10 Reduction in class size.
3. MORE AND BETTER READING MATERIALS ARE BEING PROVIDED
   3.1 Publishers providing urban oriented books and materials keyed to needs of culturally disadvantaged.
   3.2 Books better constructed to develop vocabulary, word-attack and other skills.
   3.3 Expansion in school libraries.
4. MORE AND BETTER TEACHING AIDS, CURRICULUM BULLETINS, TEACHING GUIDES ARE BEING DEVELOPED
   4.1 Skills sequence brochure now being tried out in elementary schools.
   4.2 Cumulative reading record card now being tried out as a means of combating excessive pupil-mobility and staff turnover.
   4.3 Handbook on supervision of reading (in process).
   4.4 New K-12 reading program be-

ing developed.

5. STRENGTHENING OF HOME-SCHOOL-COMMUNITY COOPERATION
    - 5.1 Operation Emeritus (retired teachers and supervisors)—Developed film "Parent's Role in Reading" as basis for school and district programs.
    - 5.2 Basic education, job training and retraining programs being vastly expanded for drop-outs, potential drop-outs, unemployed and underemployed youth and adults.
    - 5.3 Joint programs with public library, settlement houses, foundations, federally sponsored projects like Mobilization for Youth, Haryou, etc.
6. VAST BUILDING PROGRAM IS PROVIDING MORE LEARNING TIME AND MORE EFFECTIVE USE OF TEACHING TIME
    - 6.1 Reduction in short-time instruction.
    - 6.2 Extension of first year to 5 hour day.
    - 6.3 Possible extension of Kindergarten to full 5 hour day.
    - 6.4 Creation of a more efficient school plant and a more wholesome school climate necessary for optimum teaching and learning.

And now, what do we see ahead in our program to teach one million "Johnnies" to read? For the "Look Ahead," I should like to just restate some highlights from the brilliant paper presented by Assistant Superintendent Helene M. Lloyd at the last session of the American Association of School Administrators. Mrs. Lloyd is widely known as the greatest single contributor to New York City's program for the improvement of reading. On that occasion, Superintendent Lloyd said, "In our all-out assault on the problem in New York City, the greatest promise of progress seems to be offered by eight avenues." She suggested these avenues:

*Avenue 1: New types of tests will be developed to give a more valid picture of the disadvantaged child's capacity to learn to read.* We must rapidly replace our present group intelligence and reading readiness tests with measuring rods that do not militate against the disadvantaged and, at the same time, give a true picture about the abilities and needs of all the other children in our schools.

A start in this direction has been made by New York City Schools. We are developing, in cooperation with the Educational Testing Service, a new type test for use with our first grade children next year in lieu of the group intelligence test. If the new type test proves successful in grade one, similar tests will then be developed for upper grade levels. The New York City reading readiness test is also undergoing revision to take into account the affirmative assets of the socially disadvantaged.

*Avenue 2: All-out efforts will be made in the years ahead to encourage earlier language development and to build necessary concepts.* We know that language patterns are firmly implanted by the time a child is six years old. Therefore, the socially disadvantaged child *must* have our help with language and concept development *in the pre-school years.* This means that school systems in urban areas will have increasing numbers of nursery schools, summer playschools for pre-school children, workshops for their parents.

*Avenue 3: The development of urban-oriented materials will be accelerated.* This reading material must not be today's material with a few new stories, a few new words, or a few new photographs added. This material must be largely new, growing out of the interests, vocabulary, and experiences of *every* type of city child including the socially disadvantaged. The material will include more than a series of basal readers; it will include a full and powerful gamut of skill kits, tapes, recordings, filmstrips, packaged materials, programed materials.

*Avenue 4: The pre-service and in-service education of teachers in the area of reading will be improved.* Today's drive for improvement in the quality of reading instruction, the need for which was underscored by the results reported in Mary Austin's book, *The First "R,"* will continue with increased momentum in the years just ahead. Let me stress the words *with increased momentum.*

We know the classroom teacher is the

key factor in any reading improvement program. In teaching reading to the socially disadvantaged, this teacher must not only be a skilled reading technician, but also must have an understanding of and respect for varying cultural and ethnic groups as well as a sound background in mental hygiene and child guidance.

In urban centers, televised courses in the teaching of reading, with emphasis on mental hygiene and human relations, will be expanded and become a standard part of both in-service and pre-service training. These television courses, however, cannot be the *main* answer. Teachers and teacher trainees must get *guided experience* in teaching reading to children under the direction of highly qualified reading specialists.

On the in-service level, the teacher will obtain highly qualified guidance in three ways:

*First,* and foremost, from his supervisor who, because of certification requirements or because of professional interest and need will increase his skill as a reading technician. This increased skill in the teaching of reading will be necessary because of the ever-increasing leadership role of the supervisor in developing a quality reading program. The increased ability in reading will also be necessary because the supervisor will be and must be held directly accountable to the Board of Education and to parents for each child's progress in reading *regardless* of the number of reading specialists in the school.

*Second,* the teacher will receive help from a special teacher of reading assigned to his school to assist in the improvement of reading instruction.

*Third,* the teacher will receive help from college specialists working in and with the public schools.

*Avenue 5: There will be an increase in the quality and the quantity of the special personnel provided for upgrading reading in schools in disadvantaged areas.* Let us consider just a few of these special personnel.

*First, Speech Specialists.* We shall see within the next few years a new utilization of speech specialists in all schools in disadvantaged areas. We know that there is a close relation between speech problems and reading problems. The relation is such that one cannot readily solve the reading problem without first solving the speech problem.

*Second, Teachers of Library.* We foresee the day when the library will serve as the coordinating hub of every elementary school's reading program. The Teacher of Library will not only perform all the usual librarian services, but will also maintain a rotating flow of books from the library to each classroom.

*Third, Reading Clinics.* To meet the needs of the retarded reader who is emotionally disturbed, we will need more reading clinics in disadvantaged areas. From these areas particularly come children with grave, deep-seated problems that can be resolved only by the clinic team. Included in this team are the following: a reading counselor, speech therapist, social worker, psychologist and when needed, the psychiatrist.

*Avenue 6: The reading program will be stabilized, particularly in disadvantaged areas, by the use of adequate reading records.* A basic characteristic of children in socially-disadvantaged areas is the excessive mobility of their families.

Because some type of reading record card is a *must,* especially for those children who live on wheels, staffs in our urban centers must develop, as quickly as possible, a type of Reading Record Card to fit the needs of the children and school staff.

*Avenue 7: We will focus on more and improved research studies particularly in beginning reading for all children, with special emphasis on disadvantaged.* Before making any drastic changes in our first-grade reading programs, because of pressures from those who believe in more phonics, we would be wise to wait until the fall of 1965 when the results from this nation-wide focus on first-grade reading can be carefully analyzed in light of implications for our own school systems. After taking a hard look at these research results, we would be in a far sounder position to take appropriate action.

*Avenue 8: We will find means to stretch the school day and school year to provide the required reading instruction time for* *socially disadvantaged children.*

In closing then, let me say, the future looks bright indeed in the vitally important business of teaching our one million "Johnnies" to read. Obviously the task is one of truly awesome proportions, determining the very lives of our children, and perhaps, the very survival of our nation. I feel hopeful of the reading future for New York City because so many people, teachers, supervisors, college personnel and parents are attacking the problem with full vigor and unabating determination. We all know so well that we cannot, we must not, we dare not fail our one million "Johnnies."

## 3. What Measures Stand the Test of Time?

ELIZABETH GRAY VINING

WHEN I first began to write books for children, nearly forty years ago, only three or four publishing houses had special departments for junior books. It was May Massee, I think, who, disliking the word *juvenile,* invented the term *junior books.* She was my editor and one of the three pioneers in this new field; the other two were Louise Seaman and Helen Dean Fish, all three brilliant, original women, dedicated heart and soul to the cause of publishing books of quality and beauty, "distinguished books," and of getting them to the children.

Now the whole scene has changed. I would not venture even to guess how many houses publish children's books or how many thousands of books they put out each year. There are still, of course, editors with the same passion for excellence; books of distinction are still being published—and more of them than there were forty years ago—but it is harder to find them among the piles and piles of bright, gay, but too often commonplace volumes that come pouring from the presses in such bewildering numbers. Some will live, going on in edition after edition to delight coming generations of children, but more of them will fall into oblivion like last year's leaves. Some of real merit will drift out of memory just because through some ill luck they have not managed to attract the attention of enough peope who recognize them for what they are. It is a good thing, I think, for those of us who really care about children's reading — teachers, librarians, book-sellers, editors, writers — when we get together, to pause and ask ourselves again what it is we want to find in the books we select for our children to read, what are the qualities that make some books live and others wither and dissolve under the pressure of time.

I am going to suggest tentatively some of the reasons why I think certain books have survived and why we should look for the qualities they embody in the books we choose out of the new books each year. I have chosen a score of books published between 1864 and 1944 from which to draw examples. I might have chosen many others equally good, but these will do, for they are varied: adventure stories, modern fairy tales, stories of home and character, animal stories, historical tales, stories of other lands. They are all intended for that wide, not too closely defined, middle group of children, too old for picture books, not yet ready for teen-age novels. They illustrate the points I want to make. I selected 1944 as the stopping point, for that gives the newest of them twenty years of survival already and four generations of the eight-to-thirteen-year-olds have liked them and passed them on. I chose 1864 as the starting point, both because it is just a century ago and because it was the year in which a revolutionary book was published.

Before 1864 children's books had an ax to grind, a moral ax. They were intended to instruct and to instill moral virtues. Maria Edgeworth's Tales, which were among the best of them and included in spite of everything some good stories, were published under the title, *The Parent's Assistant,* with a preface in which the author explained that—for a reason incredible today—she had divided her stories into two parts "as they were designed for different classes of children." Not good readers and poor readers, mind you, but actually different ranks of society who have, she said, "few ideas, few habits in common." Though truth, justice, and humanity were, she considered, confined to no particular rank, other virtues such as industry, frugality, generosity, prudence, were parcelled out to those who needed them most. But in 1864 there appeared a book intended only to please children—*Alice's Adventures in Wonderland*.

Some reviewers cried out against it in horror, saying that no child would ever read such stuff, but Lewis Carroll knew before it was published that children would take it to their hearts. He had tried it not only upon the three little girls for whom it was first written, but he had also taken it with him when he visited his friend George Macdonald and had read it to Macdonald's six-year-old son, Greville, who exclaimed that "there ought to be sixty thousand volumes of it." Seventeen different publishers today have more than seventeen different editions of *Alice* on the market, and in the century of its life it has been read by millions of children in who can say how many different languages. Undoubtedly part of its magic comes from the fact that the author so thoroughly enjoyed the writing of it himself. And that brings me to the first point that I should like to make about the essential elements in the books that live—the sincerity of the writer.

The sincerity of the writer seems to me the basic, the essential element lacking which he had better not even dip his pen in the ink. I wish there were another word than sincerity to express what I mean; I do not mean veracity—that is also necessary but it is something else. I mean that there is nothing feigned or pretended in his attitude toward the child for whom he writes or toward the book that he writes. It is a cliché to say that we should never "write down" to children, but what do we mean by that? We mean that we should never pretend that we stand on some higher plane than they do, from which height we condescend to instruct or entertain them. True, we are older than they are, more experienced, better informed, but in these doubtful advantages they will catch up with us soon enough, if not overtake us. On the other hand, they have still their innocence of eye, that priceless gift of seeing the world freshly without preconceived ideas which we, unless we are poets, have long since lost. They have still the shining sense of wonder that they brought with them from wherever they came; ours, unless we are saints, is badly tarnished. They have still an uncalculating and terrifying honesty which we, unless we are of a rare variety of madman, have long since sacrificed to getting along with people and making our way in the world. All of these glorious endowments, which we—most of us—have lost, they have. They too—most of them—will lose them, but they have them now. It behooves us to approach our child readers with respect.

As, to do us justice, most of us do. Any of the books which I am thinking about would illustrate my point, but perhaps Arthur Ransome's *Swallows and Amazons* (1931) is a good one to take. The children in the story—as I am sure you remember—are camping on an island in one of the English lakes, with their sailboat, and playing at being explorers. Their adventures, both real and imaginary, are told as *they* see them, and their acceptance of the fact that it is a game even while they pursue it with wholehearted seriousness and their shifts as necessity dictates from regarding the adult on the mainland now as mother and now as "the female native" could be conveyed without condescension only by a writer who thoroughly understood that children, to themselves, never feel young (as adults, to themselves, seldom feel old) and who was never in any slightest degree guilty of exchanging, so to speak, a knowing glance with other adults over their heads as he wrote.

Or take George Macdonald's *At the Back of the North Wind* (1871) which speaks directly to the child's sense of wonder. Adults may feel compelled to speculate and argue about what he means by the land at the back of the North Wind—Fairyland? death?—but Macdonald does not need to explain to children; they are caught up with Diamond, cradled and secure in the nest of the North Wind's hair and carried off to an experience that they accept—and feed on—without question.

The author's sincerity towards his audience includes also his sincerity in regard to his work; he should respect it as he respects his readers. Does he write, is the crucial question, because he has something he wants to say, or because he would like to make some money, or to get himself a toe-hold in the writing world? A great many mediocre books that are doomed to disappear are written not by unskilled beginners doing their best but by competent scribblers who toss off something easy thinking that anything is good enough for children and wanting to get in on a good market. People are sometimes ashamed of writing for children, as if it were a second-grade sort of writing, as easy as it looks, and they cover their shame by an assumed superiority that eats like a worm at the very heart of their work. Or does the author write because some editor has asked him to do a book on a particular subject? Does he say what he has to say in whatever time it takes him or does he cut it to a prescribed length, as if he were cutting so many yards of cloth?

There are exceptions to every rule and one outstanding exception to this pronouncement about editor-ordered books of a prescribed length is Selma Lagerlof's *The Wonderful Adventures of Nils* (1907). The great Swedish novelist, winner of the Nobel Prize, was asked by the National Teachers Association to write a geographical reader on Sweden. What might have been a perfunctory job became, in the hands of a very gifted writer who respected both her work and her readers, a living masterpiece.

Caroline Dale Snedeker, whose *Theras and His Town* (1923) is still bringing ancient Athens to life for children, did not even, she told me once, consciously write for children. "I have a book to write," she said, "and I write it the best I can—and it turns out to be a book for children." She was a wonderfully gentle, quiet person with glowing eyes, an inspiring person, with her sympathy and her vision, for a young writer, as I was then, to meet.

Closely bound up with what I have called the writer's sincerity is his feeling about truth. He should have a passion for truth, truth of fact, of place, of character, truth of imagination. If a story is to be laid in a particular time or a particular country he must make as much effort to draw an accurate picture of that time or country as he would if he were writing for a scholarly journal. He will, it is true, have to discard much of what he learns, will have to select with the greatest care the significant and illuminating detail, will have to assimilate his knowledge so that it is part of the fabric of the story and not a hard crust on the top of it, but he must not stint his research just because it is a book for children and they'll never know the difference.

The most wonderful historical book for children remains *Puck of Pook's Hill* (1906). It is original and perhaps unique in the way it combines historical fact with fantasy; through the magic of oak, ash, and thorn Puck himself appears to two English children in a meadow and brings before them living figures from history to tell about their lives in a series of stories that not only make vivid different periods of English history but present the whole unified sweep of it to a child's understanding.

Another book that gives us something of the sweep of history, in another land, is Cornelia Meig's *Master Simon's Garden* (1916) in which through three generations we see the flowering of the ideas of tolerance and freedom.

Or consider Mary Mapes Dodge's *Hans Brinker, or The Silver Skates*, now, it is hard to believe, ninety-nine years old and still available in editions by six different publishers. She was writing of a foreign country and she wrote with such vividness and such accuracy—and told so well her story, for we must never forget the story—that her Holland is not a period piece but a colorful and beloved land to today's children and so authentic that the Dutch people themselves have declared it to be the best picture of their country.

Then there is the matter of truth to imagination. Take Kenneth Grahame's *The Wind in the Willows*. It is an animal story of a kind imitated by generations of sentimentalists who make their cute animals walk and talk and think they are writing the kind of book that Kenneth Grahame wrote. But Kenneth Grahame's animals are real animals—and sometimes they are real people at the same time—because of the unwavering truth of his imagination.

Of his book Grahame wrote, "As for animals I wrote about the most familiar and domestic in *The Wind in the Willows* because I felt a duty to them as a friend. Every animal, by instinct, lives according to his nature. Thereby he lives wisely and betters the tradition of mankind. No animal is ever tempted to belie his nature. Every animal is honest, every animal is straightforward. Every animal is true."

I think next of the quality of *life* in stories, of the writer's ability to make his characters live as real people, who move and make mistakes and love and repent and laugh, people whom we know, people who become our friends.

All the March family in *Little Women* live, but especially Jo, inky-fingered, impulsive, human, lovable Jo; so that after ninety-seven years the book is published by fourteen different publishers in this country and in other countries girls grow up thinking that all American children share their Christmas breakfast with their poor neighbors. *Rebecca of Sunnybrook Farm* (1902) still cherishes her parasol, "the dearest thing in life to me but a dreadful care," sturdy, unfalteringly herself, a lover of life, a living child. And *Heidi* (published in the U. S. in 1884) lives on in her Swiss mountains, sleeping on her sweet-smelling hay and eating the toasted goat's-milk cheese that tastes better than almost any other food in literature. The two self-centered and neurotic but completely real children in *The Secret Garden* (1909), just out in a new and glamorous edition, who find health and joy through finding something to love and cherish continue to hold us in spite of our more realistic approach today to manor houses and moors and gardens. In Kate Seredy's *The Good Master* (1935) two children, Kate and Jancsi, as opposite as possible to Mary and Colin, healthy and wild and joyous, thrive on the Hungarian farm of Kate Seredy's own childhood.

I think next of the actual writing of the book and the skill and beauty with which it is done. In the February *Ladies Home Journal* Rumer Godden has an article, "Words Make the Book," in which she pleads for books written freely by the writers, unhampered by any sort of word list or, to use the popular euphemism, "limited vocabulary." "Given the chance," she says, "children glory in words." They are sensitive to shades of meaning in words, they like the rhythm of polysyllabic words when they are well used. With this I am in hearty agreement as I am sure most other writers are. I would add that the writer for children, though like William Penn he does not seek "fine words and chiming expressions," must be free to use the most vivid, the most exact, the most appropriate words he can find to embody the meaning of his story; and if his thought is clear I am certain that children will be able to guess the meaning of a colorful new word from the context—and the guessing itself is a stretching, as good for his mental muscles as arm and leg exercises are for his physical ones.

Since I have been in Japan and taught children who were beginning to study English and whose vocabulary was therefore far behind their interests, I have had more understanding of the desire of the teacher for books of mature interest and simple vocabulary for the slow readers. What I did find, however, in my work in Japan was that it is not the unfamiliar word used exactly and consistently that makes the trouble; it is the word used vaguely or incorrectly, the sentence construction that is muddled, the thought is not clear to begin with and therefore is confused in its expression, that really is difficult for the struggling reader to understand.

I think too that the highest magic of words is to use the ordinary ones in a fresh way, so that they make us catch our breath. Shakespeare did it incomparably. "Golden lads and lasses must like chimney sweepers come to dust." "Finish, good lady; the bright day is done And we are for the dark." But you find it in children's books too. Listen to this from *The Wind in the Willows:* "The dusk advanced on him steadily, rapidly, gathering in behind and before; and the light seemed to be draining away like flood water." Or this from Robert Lawson's *Rabbit Hill* (1944):

> The great day dawned and the moving vans came. They creaked, swayed and rumbled up the driveway, their drivers completely unaware that they were being watched by dozens of small bright eyes. In bayberry clumps, in thickets and long grass,

> all the Little Animals were gathered to inspect the new arrivals.

Or this from *Hitty* (1930):

> It was during this time that I came to know monkeys and their ways as I never should have come to know them otherwise. At first it made me very uneasy to have them clambering about in the branches all round me, with their crazy chatterings and their lean and supple tails. They had a way of coming close and staring me almost out of countenance and some of the bolder ones even poked me with their skinny paws. Their fingers were thin and inquisitive and they used them for all the world like human beings.

Now whether *clambering* and *inquisitive* are on the word lists or not, I don't know, but I am sure that any child could guess their meaning from the context, and I know that he would feel the touch of the monkeys—and feel too, though it is nowhere said, the smallness of Hitty in comparison to the monkeys. Of the use of words, Rachel Field herself said, "I felt from the first that Hitty would have had a very prim but spicy way of talking and so I tried to select every word and phrase carefully, for I think people don't give words half enough credit. Yet they are what really affect readers, children most of all because they are the most impressionable."

Helen Dean Fish wrote of Hugh Lofting that he "believed that a good story should be good for a reader of any age; that it was his job as author to write so simply and entertainingly that a child could understand all he had to say, even when meeting unfamiliar words and expressions."

And last of all, I think we must look at the books we give our children to see what, when the book is finished, is the residue left in the child's mind. Morals, explicit and labored, have very properly gone out of style. We no longer, to quote somebody wittier than I, sell our souls for a pot of message. But there is something else, which I have called a residue, which is not a moral, nor a message, but a feeling about life that the reader can take with him and make his own. There is no place in children's books for a defeatest attitude, a hint that people are not to be trusted, or an irony beyond their comprehension. That life is good should be the underlying burden of all our books for children, but there are other things too that the author leaves with them. *The Hundred Dresses,* by Eleanor Estes (1944), for instance, nowhere preaches; it tells a story, simply, subtly, unforgettably. The little girl, Maddie, who teased and laughed at Wanda Petronski from Boggins Hill not because she wanted to but because the others were doing it, comes to see that she has hurt herself even more than she has hurt Wanda, but the point is nowhere labored. The story is told, and all of us who have ever stood by and said nothing when wrong was being done know that the story is about us.

We do not need the title of Armstrong Perry's *Call It Courage* (1944) to know what the book is about. It is not because of its title, but because of its sensitive and perceptive understanding of the boy who was considered a coward and the authentic portrayal of the dangers and beauties of the world into which he went to find himself, that we come away with the conviction that courage is not an endowment but something to be won. Readers of *The Story of Dr. Dolittle* (1920) and the other books that followed will take delight in the little round doctor with the top hat, perhaps without even knowing that what they are seeing is the Golden Rule in action; but they will have assimilated it nonetheless. Elizabeth Coatsworth's beautiful *The Cat That Went to Heaven* (1931) brings, besides its recreation of the stories about the Buddha and the atmosphere of the East, a warm sense of gentleness and of compassion.

I have said almost nothing about the story itself, and that of course is what all else hangs on. The story must move, it must catch and hold our interest—but it is easy enough to find out about the story. All the book-reviews tell us that, summing it up faithfully—and often facilely—and reducing it to its outlines. Almost none of the book reviews, except for the very unusual ones, tell us anything about these other important, though not so immediately visible, elements that I have been talking about: the writer's sincerity, his devotion to truth, the sense of life that he creates, the beauty and skill of his writing, the residue of affirmation that he leaves with the reader. These are the things we must look for ourselves.

# PART II CURRENT ISSUES IN READING

## 1. Educating Teachers for Secondary Reading Instruction

A. STERL ARTLEY

IN TERMS of evidence gathered from teachers and principals, and from research studies dealing with the status of reading on the secondary level, there seems to be ample indication that we have done a better job of showing the need for an extended reading program in grades seven through twelve than we have in training teachers to fill the positions that we have created.

Studies completed in the last few years by Smith,[1] Baughman,[2] and Jordan[3] in Missouri, Florida, and Illinois show that in half to over three-fourths of the junior high schools surveyed, some type of reading course or courses were included in their offerings. These studies taken only as examples are indicative of a growing trend to include programs of reading instruction in at least a segment of the secondary schools. This is the beginning of what one hopes will become the practice where reading instruction will be as much a part of the school program in grades seven through twelve as in grades one through six.

However, surveys similar to those above indicate a serious deficiency in the training of those having the responsibility for organizing and teaching reading courses. Thornton[4] found that in 120 high schools of Texas only one teacher in three had any type of specialized training in reading in those schools where it was taught. Smith found in the study to which reference has been made that in one-half of the schools where the program met this criteria of comprehensiveness the person *supervising* or *directing* it has no training in the reading area. Smith also found in those schools not having a program that the reason most frequently given was, "lack of specialized help."

McGinnis[5] recently reported, on the basis of a study in Michigan, that whereas 82 per cent of the high school teachers were taught in college that reading skills could be improved, only ten per cent received any instruction in how to teach reading. She concludes, "At the present time secondary teachers are not providing instruction in reading, nor are they adequately prepared to do so."

### A Program of Pre-Service Training

It is obvious that one of the first things that must be done is for institutions preparing teachers on the secondary level to include as part of the pre-service training a course in developmental reading. Mary Austin even goes so far as to recommend "that a course in basic reading instruction be *required* (italics mine) of all prospective secondary teachers."[6] Furthermore, she recommends that this should be a separate three-hour course rather than a unit in an English methods course. With these recommendations we heartily concur. Though they may appear extreme to those who are reluctant to add additional professional courses to the education curriculum, the fact remains that a teacher can teach effectively only when he is secure in his understanding of the objectives of the course he is teaching and the methods of attaining them. This is being said with a full awareness of the importance of a knowledge of the subject matter which is to be taught.

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[1] Kenneth J. Smith. *A Survey of Seventh and Eighth Grade Reading Programs in Selected AAA Missouri Public Schools.* Unpublished doctoral dissertation, University of Missouri, 1963.

[2] M. D. Baughman. "Special Reading Instruction in Illinois Junior High Schools," *Bulletin of the National Association of Secondary School Principals,* 44:90-95, November, 1960.

[3] James Jordan. "A Survey of Certain Policies and Practices in Florida Junior High Schools," *Bulletin of the National Association of Secondary School Principals,* 42 (September, 1958), pp. 71-77.

[4] Robert Thornton. *Developmental Reading in Texas Secondary Schools.* Texas Study of Secondary Education, Research Study No. 23. Austin: State Department of Education, 1957.

[5] Dorothy McGinnis. "The Preparation and Responsibility of Secondary Teachers in the Field of Reading." *The Reading Teacher,* 15 (November, 1961), pp. 92-97.

[6] Mary Austin, et al. *The Torch Lighters,* Cambridge: Harvard University Press, 1961.

However, making available a professional course does not appear to solve all the problems. The difficulty is that of getting advisers to include such a course in their advisee's program. Though this may attest to the fact that some of us may be better readers than teachers, the real reason appears to be that the program is frequently arranged by an adviser who is a subject matter specialist. With his academic orientation the adviser is inclined to view any type of education course as suspect, to say nothing about a course in reading, for, "isn't reading taught on the elementary level?" Being divorced from the actual high school classroom, as many of them are, the advisers are quite unaware of the changes that have taken place in points of view and practice. To this problem there seems to be no easy solution other than that of deliberately establishing a close liaison with these advisers and pointing up to them the facts as they exist in high schools, thus helping them see the need for preparing their students more adequately for the conditions that they will actually face when they step into a classroom.

### A Program of In-Service Training

Our past failure to train teachers to handle reading on the secondary level leaves staffs quite unprepared to help the present generation of students. It seems necessary, then, to provide an in-service training program to prepare teachers on the job to do what they should have learned to do in college. It is to this problem that a committee of the International Reading Association addressed itself in Chicago last fall. The papers presented at this meeting have been published recently in monograph form.[7] Sections deal with such topics as the organization of an all-school instructional program, preparing teachers in all areas to teach reading, clinical reading, etc. For one who is organizing an in-service program of instruction, this monograph should prove invaluable.

Space does not permit a description of successful in-service programs. Suffice it to say that the development of such a program takes time. To develop a point of view, to train teachers, and to get a program under way cannot be done in a few weeks or months. In fact, reports of the more successful programs indicate that several years may be necessary to get a program off the drawing board into successful practice.

### Summary

Evidence is accumulating to show that the demand for higher levels of reading maturity to meet adult needs is forcing the extension of the developmental reading program into the junior and senior high school levels. In increasing numbers secondary schools are initiating programs of reading instruction for all students in the school, as well as for those with reading deficiencies. The demand for trained personnel to carry out these programs has caught the profession unprepared. It seems obvious that to meet the urgent need for teachers two things must be done. The first is to provide adequate pre-service preparation of secondary school trainees in the teaching of reading, and the second is to institute in-service programs for those now teaching. To do less is to solve the problem by default.

## 2. Reading: Linguistic and Psychological Bases

EMMETT ALBERT BETTS

ARE WE searching for effortless ways to teach reading? Effortless for the teacher or for the pupils? Or, are we researching more effective ways of teaching more pupils to read? This is one issue today which is seldom discussed in open meetings.

What hope is entertained by the teacher who tries out Bloomfield's *bad-lad-gad* approach to beginning reading? Does the use of these isolated sense and nonsense words teach the pupil the so-called alphabetic principle? If so, does the teacher expect learning from drill on isolated words to carry over into effective sentence and paragraph reading? Does the teacher believe that learning the so-called alphabetic principle gives the pupil the feel for intonation and other grammatical aspects of reading so essential to reading as an enjoyable, *meaningful* process? Will interest be heightened and reading for meaning be strengthened by a distorted, tongue-twister language used to tell about *Nat the rat, He tags the bags,* or *Pat a fat cat?* If, in the light of available experimental studies, the teacher's euphoria is not justified, then it appears that we should return to the world of reality.

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[7] International Reading Association. *Perspectives in Reading No. 2: Reading Instruction in Secondary Schools*, Newark, Delaware, Box 119: The Association, 1964.

These questions are not intended to raise doubts regarding the motivation or the scholarship of that giant in linguistics, the late Leonard Bloomfield. Nor are they intended to deprecate the substantial contributions of linguistics to reading instruction. Instead, they are intended to raise serious doubts regarding the adequacy of one facet of linguistics as the whole base for effective reading instruction.

Augmented alphabets for use in beginning reading are another issue. What hope is entertained by the teacher who tries out a revised alphabet? Is the alphabet really phonemic, having only one letter for each speech sound? If not, will the use of more than one letter to represent a sound facilitate or interfere with learning the alphabetic principle? Do the letters represent the same sounds in all regions? Does the use of an augmented alphabet increase the per cent of pupils who are ready for reading at a given age? Does its use either eliminate or minimize word perception needs? What is the effect on the pupil who has learned to write his name and/or to do some reading? Do the reversals (e.g. z-s, th-jh) and the slight differences between letters (e.g. W-W) create new perceptual problems? Is progress in reading less hazardous? In short, did the teacher assess the linguistic and psychological advantages and limitations of the augmented alphabet or did she buy it, halo and all?

Again, the above questions are not intended to cast doubt on the motivation of the creators of these alphabets. Neither are these questions intended as a left-handed justification of the status quo regarding our mangled spellings of a great many words. Rather, they are intended to raise doubts in the minds of teachers who expect a single idea regarding our elaborate decoding system called reading to revolutionize instruction.

## In Search of Better Structure

In the educational world today there is a diversity of *opinions* regarding the effortless teaching of reading. There are those who imply that either an individualized plan or a group plan to nurture individual differences in the classroom makes obsolete all *methods* of teaching reading. There are those who suggest that rigid controls for selecting a beginning reading vocabulary in terms of only three spelling patterns (e.g., *at-cat-rat, ate-mate-rate, eat-meat-seat*), provide for all word-perception needs and, perhaps, all needs in learning to read. In this connection, there are those who propose using all capital letters, all lower case letters, or a revised alphabet to solve the problems in beginning reading. There are those who offer a thinking program as the basis for reading instruction. Finally, there are those who intimate that any trade book offers better reading content than any textbook. For each wrong, someone has proposed a remedy, distorting the confusion and adding to the risks of irresolution on the part of classroom teachers. It is little wonder that these custodians of quality, in search of structure in instruction, resort to chasing ambivalences.

Undoubtedly, the teaching of reading is in the process of being updated. In fact, it is reasonable to expect that within the next decade the enormous gap between research in reading and cognate areas (e.g., linguistics, communication, semantics, psychology) and application to classroom practices will be significantly narrowed. This long interim between research and revised teaching practices will be reduced by the cooperative efforts of scholars in disciplines concerned with the reading *process* rather than by a linguist, a semanticist, or some other person with inconspicuous qualifications for teaching reading.

In the meantime, there is no need to live on expectations, for a significant amount of experimental evidence awaits those who will pay the price of scholarship to dig for it, to assay it for relevance and significance to reading instruction, and to make it an integral part of the structure of the reading program.

Here, for example, are crucial questions on which we have some evidence:

1. What is acceptable reading behavior? What are some crucial causes of inefficient reading?

2. By what means are levels of achievement and specific needs in motivation, word perception, and thinking identified?

3. How does the teacher help pupils to develop the attitude that they are to identify their own needs and to ask for help? To evaluate the products of their own thinking on a project?

4. How and when are new word perception skills taught?

5. What does the teacher do when the pupil requests help on the identification of a word or the understanding of an idea during his silent reading?

6. How does the teacher help pupils to make automatic use of their word perception skills?

7. What is the relationship between the level of professional competence of the teacher and the effective use of group and/or individualized plans for differentiating instruction?

## Bases of Reading Instruction

Effective reading instruction rests on two broad bases: linguistics and psychology.

Linguists have improved reading instruction by continuing to research the structure of language. Their identification of large segments of distinctive speech sounds, called phonemes, has helped to put the teaching of phonics (relationships between letters and sounds) and the making of dictionaries on a more nearly scientific basis. Their study of intonation patterns, morphemes (units of meaning as *boy* and *s* in *boys*), and syntax has contributed insight regarding sentence comprehension. These linguistic insights regarding two levels of language structure —the phonological and the grammatical —offer a worthwhile *content* for reading instruction. While the contributions to reading instruction by linguists are limited, they are at the same time essential.

Psychologists, on the other hand, have improved reading instruction by researching the structure of (1) individual differences in learning, (2) motivation, (3) perception, (4) concept formation, and (5) thinking abilities. They have helped to put on a more nearly scientific basis the differentiation of reading instruction and motivation. They have helped to put the teaching of phonic skills on a broader word-perception basis. Finally, they have provided insights regarding reading as a thinking process, thereby shifting the emphasis from word-calling to thinking.

There is no dichotomy between linguistics and psychology in the teaching of word-perception skills or of thinking abilities. In word-perception, for example, a number of factors operate: need, set, feedback, closure, contrast, etc. To be more specific, there can be no feedback between the written word and the spoken word in silent reading unless the pupil has been taught the relationships between word forms and speech patterns. Moreover, the pupil needs to learn (1) the usual sounds represented by letters (e.g., the sound represented by *ir* in *bird*), (2) the different sounds represented by a letter or group of letters (e.g., the sounds represented by *s* in *saw, was* and *sure*), and (3) the different letters used to represent a sound (e.g., the *sh* sound represented by *s* in *sure* and *ch* in *Chicago*).

When a pupil asks for help on the identification of a word during his silent reading, the teacher may ask, "What part of the word is causing your problem?" If the pupil has been taught the required skill (e.g., the usual sound represented by *qu* in *quick*, or a generalization), he may recall relevant previous learning when confronted with the written word. That is, he may apply the skill.

In this connection, two types of generalizations regarding phoneme-phonogram relationships merit consideration:

1. The usual sound represented by a phonogram in a *whole* word:
   a. Vowels, as *au* in *caught, ar* in *far, ir* in *bird, ou* in *out*.
   b. Consonants, as *qu* in *quick, dg* in *edge, gh* in *rough*.
2. The rule, or generalization, regarding a situation:
   a. Vowels

(1) (Consonant) - vowel-consonant, as in *at-bat, it-bit.*

(2) (Consonant) - vowel-consonant + final *e,* as in *make, write, note.*

(3) (Consonant) - two vowel letters-consonant, as in *boat, eat, bait.*

b. Consonants, as the /k/ sound of *ck* at the end of a syllable (*back, backing*); /s/ sound of *c* before *i* (*city*); /sh/ sound of *c* before *i* (*vicious*).

Inherent in the above thumb-nail sketch of one facet of word-perception are basic principles of both linguistics and psychology.

## 3. How Can One Tell What New Practices Seem Most Promising?

ARTHUR I. GATES

"NEW" METHODS of teaching reading are appearing now with unusual frequency. More than a dozen types of phonic training, many varieties of individualized teaching, a host of teaching machines and gadgets, and several augmented alphabets have been recently advocated, some with extraordinary enthusiasm. Several procedures developed in other lands such as the German "Sprechspur" program are less well publicized.

Since progress can come only through innovation, we as investigators should encourage new ventures. But such enterprise can be confusing to us as teachers. How can we determine the relative merits of all these materials and methods? In most cases we cannot do so in a short time. We must reserve judgment. There are, however, a few ways of deriving some useful hunches about them now.

First, we can consider the psychological principles underlying the program. For example, the practice of providing a substantial amount of individual diagnosis and instruction is grounded in sound psychological principles. The method of beginning reading with an augmented alphabet, on the other hand, is in one respect faulty in principle. One of the soundest principles of psychology is that it is unwise to use a crutch or propaedeutic, (that is, to require a person to learn a procedure that must later be unlearned or discarded and replaced by another) if one can avoid it. If such a crutch shows merit, one should find out what its fundamental virtue is (it is often not the one it appears to be), and then exhaust every possibility of securing its advantages in some other way. The merit of the extended alphabet is that it simplifies the phonic problems in beginning reading, and several other ways of doing this without crutches have already been suggested.

A second suggestion for estimating the merits of a practice is to make a critical survey of the evidence offered in support of it. I have never experienced such a flood of propaganda, unsupported by real evidence, as that now descending on us. This makes it all the more important to study such research data as are available. Assistance in carrying out this difficult task has been provided by several recent publications such as Helen M. Robinson's annual "Summary of Investigations Relating to Reading," the latest of which is in *The Reading Teacher,* February 1964, pp. 326-392; and in various topical summaries such Edward Fry, "Programed Instruction in Reading," *The Reading Teacher,* March 1964, pp. 453-459; and Patrick Groff, "Comparisons of Individualized and Ability Grouping Approaches to Teaching Reading: A Supplement," *Elementary English,* March 1964, pp. 238-241. You will note in Groff's report, for example, that comparative studies of "individualized teaching" give different results depending on the grade, the teacher, the locality, and the particular procedure. You will often observe that practices for which the author claimed remarkable results when they were first introduced show no such merit in later tests in other situations. For example, note the results of studies of the New Castle film-text method reported in Robinson's review, above.

Another suggestion is to study the history of the "new" ventures. Most of them have a long ancestry. You can observe several types of "individualized teaching" in reports written in 1903 by teachers of the Horace Mann School. E. B. Huey in his book published in 1908 discusses at length several augmented alphabets which were in wide use in readers before that time. Many of the phonic systems recently introduced differ only slightly from those extensively employed from 1900 to 1930. "Speed reading" was suggested by James McKeen Cattell in 1885 and reintroduced at least a dozen times since then. I recommend that you consider all the "new" materials and methods in the light of history as reported in two excellent books: E. B. Huey, *The Psychology and Pedagogy of Reading*, New York: The Macmillan Company, 1908; and Nila B. Smith, *American Reading Instruction*, New York: Silver, Burdett and Company, 1934.

Study of the history of reading programs shows many instances in which teachers and investigators after falling in love at first sight with a program went off for a glorious honeymoon, only to find the initial "fervor and faith" giving way to disillusionment later. One should be critical of every "new" program while it is in the honeymoon stage. One should adopt one of them only for strictly experimental use until it has received a careful and extensive tryout in "neutral" territory and in the hands of neutral teachers. An admirable example of such a study reported recently by Frederick B. Davis compared a predominantly phonic method with a multiple approach in teaching in the Philippines a native language, which had an intrinsically "simplified" alphabet of only twenty-four sounds, each of which was represented almost invariably by the same letter. The results are of great significance.

A material or method should not be condemned because it is old in whole or part. Conditions are now so different from those of even twenty-five years ago that practices which did poorly then may work better now, and *vice versa*. We must always remember, moreover, that a procedure may be good for certain children when it is poor for others, even for ninety-five per cent of the others, and also that a program that works splendidly for the majority may be devastatingly unsuited to a few. All the evidence warns us to give up the search for the one all-purpose gadget; the teacher should equip herself with a kit of many tools and skills.

We now have before us many promising new ventures in the teaching of reading. Adequately to extract all the good juices from these fruits while eliminating the bad ones, taking into account individual tastes and allergies, and learning how to combine them into various new palatable and nutritious diets, will require far more extensive and intricate research than we have ever had in the field of reading. I have great admiration and affection for the lone investigator working in his spare time with a few makeshift materials in his little lean-to shed, but this is not the way of sciences today. Much of the research in reading in the past has been carried on in this inadequate manner. We should now face the fact that research in reading must follow comprehensive patterns shown to be more fruitful in medicine, agriculture, engineering, and other fields.

## 4. Teaching Reading to Culturally Different Children

ALBERT J. HARRIS

THE PROBLEM of educating culturally different children is being felt most keenly in the big cities at present. Here population change has taken place with amazing rapidity. In New York City, for example, the school population of Manhattan is now more than half Negro and Puerto Rican in origin, and it is estimated that by 1970 this will be true in the entire city. At present this kind of situation is most apparent in the inner core, slum sections of the big cities. But it has already spread into many suburban communities.

Back in the 1930's we woke up to the presence of thousands of disabled readers in our schools. Those children, previously considered to be just stupid or lazy, were shown by intelligence tests to be of normal or even above normal mental ability in areas other than reading. Diagnostic tests and remedial and corrective programs have done much to reduce the severity of that problem.

The limited educational achievement of the typical culturally different child has also been explained by some as the result of limited ability, or lack of interest and ambition, or a combination of both. But recent evidence indicates that these stereotypes must be discarded. They are true of some, but by no means of all, of those we call culturally different or educationally disadvantaged.

The BRIDGE Project at Queens College in New York City is completing a three-year study of a large group of culturally different children who entered a junior high school in 1961. At the beginning of the seventh grade, more than two-thirds scored below fifth grade on a standardized reading test. This group, when tested with a culture-fair intelligence test, achieved a mean IQ well within the average range. Interviews with a sampling of the parents showed that, like other American parents, they had dreams of their children becoming doctors, lawyers, engineers, and so forth. Neither low potential nor lack of parental ambition is true of the majority of this group.

In the same way that meeting the challenge of the child with a special disability was a major task for the 1930's and 40's, so meeting the challenge of the massive reading retardation of our children from culturally different backgrounds is a major task for the 1960's. What works well with advantaged children does not necessarily work well with disadvantaged children. Finding out what can be done to help them become effective students is imperative for American education.

In a brief paper like this it is possible only to take a look at some of the currently significant problems in the teaching of reading to culturally different children.

Reading readiness is a very important issue. There is an increasing conviction that if school is to be effective with children who come to it seriously deficient in readiness for learning, it must begin a readiness program as early as possible. Currently much attention is being paid to experiments in developing readiness for school, starting as early as the age of three. These studies are still on a small scale, but they may lead into the development of public nursery schools for disadvantaged children in the near future.

At first grade level, there is a wide variety of specific approaches which are being advocated as specially suitable for disadvantaged or culturally different children, and all of these need careful tryout. Sylvia Ashton-Warner, in her books *Spinster* and *Teacher,* has stressed the importance of emphasizing the child's world, and providing opportunities for creative self-expression that can drain off aggression and hostility. Her general approach is quite similar to that described by Lee and Allen in *Learning to Read Through Experience,* second edition. If a major aspect of the disadvantaged child's problem is lack of experience and lack of language, then there is a strong theoretical base for a language-experience emphasis.

On the other hand, there are strong arguments in favor of a systematic, skills-centered approach. Riessman has called attention to the traditionalism of lower-class parents, their suspicion of "progressive" educational practices, and the need for firm structure in an educational program suited to children growing up in lower-class homes. Hanson, in his book on *The Amidon School,* has reported favorably on a combination of basal readers with a special phonics program, in a setting which puts emphasis on order, discipline, seriousness, and high standards of work.

Others have been concerned primarily with a disparity between the content of typical beginning reading materials and the lives of culturally different children. Many people have talked about the desirability of materials which come closer to the lives of culturally different children. Materials written with this goal in mind are just beginning to appear. The pioneer is the City Schools Reading Program, produced by the writers' committee of the great city school improvement program of the Detroit public schools, and published by Follett. Another series of pre-primers is being readied for publication by the Chandler Publishing Company of San Francisco. A third is being prepared by the staff of the Bank Street College of Education in New York. Whether these materials will actually produce improved results with culturally different children remains to be tested.

There are many other new kinds of reading programs for beginning readers that need to be tried out and evaluated in terms of their success with culturally different children. An incomplete list of these would include the following: (a) programed material, such as that produced by Sullivan Associates and published by Webster; (b) several sets of beginning reading materials with a strongly phonic emphasis; (c) materials for beginners with a linguistic basis, such as those built on the theories of Barnhart and Bloomfield, C.C. Fries, and Lefevre; (d) materials printed in Pitman's i t a and other phonetically regular alphabets.

Moving on from the beginning of reading instruction, we may well take a look at what has been called the "middle grade hump." There is a transition in reading instruction which takes place at around third grade level, from the beginning emphasis upon reading as a task in which recognizing the symbols is of paramount importance, to the reading problems of the middle grades, in which comprehension depends to a very large extent upon the reader's vocabulary, concepts, general information, and grasp of sentence structure. Here in the past some of the programs which emphasize the mechanics of reading have broken down. Provided we can get children started successfully on reading in the primary grades, do we know how to keep them moving along successfully when the material becomes thought-provoking and challenging? Very little has been done to study the special reading needs of the culturally different or disadvantaged child in the middle grades, and much more needs to be done.

In secondary schools populated largely by culturally different children, the pervasiveness of fairly severe amounts of reading retardation make it quite difficult to accomplish the usual goals of secondary school instruction. Corrective reading programs have been tried, and many of them have not proved to be very successful. The difficulty of overcoming the cumulative effect of years of failure is greater in secondary than in elementary school. In some neighborhoods, the pressure of the outside environment and particularly of gang influences provides an anti-school bias that is very difficult to overcome. It seems fairly evident that any satisfactory program at this level must be closely coordinated with the guidance, psychological, and social services available to the school, either through its own staff or through effective use of community resources.

It would be a great mistake to convey the idea that all culturally different or disadvantaged children are alike and that all have similar instructional needs. The range of individual differences is just as great as it is in the rest of the population. For example, in the junior high school population referred to near the beginning of this paper, the range in IQ's was over sixty points. Some of the children are bound for college; others would be more properly placed in a class for mentally retarded children. To assume that one program, or one teaching approach, will meet the needs of such a varied group would be indeed an oversimplification. However, the bright child in a disadvantaged group has a special problem in that if he becomes an excellent student he runs the risk of social isolation from the other children. A very real conflict of roles and goals frequently prevents this kind of youngster from making the best use of his potential ability. On the other hand, the slow child in such a population may have parents who refuse to recognize his limitations or to accept the idea that he may need a slower pace and more limited scholastic goals.

This paper has attempted to survey some of the important questions that we must ask about the teaching of reading to the culturally different or disadvantaged. This is a field in which systematic research effects are just beginning, and the answers we need are not going to be found easily or quickly.

## 5. Perceptual and Conceptual Style Related to Reading

HELEN M. ROBINSON

AS EARLY as the beginning of this century, psychologists investigating visual perception postulated two types of observers which they described as objective and subjective or part and whole perceivers. Children generally were considered to belong to the whole-perceiver group. Later research, however, revealed that there was variation in an individual's approach to perceiving objects at different times.

In 1914, Smith[1] found that when children viewed pictures tachistoscopically, some analyzed the details while others saw the pictures as wholes. Summarizing many studies of visual perception, Vernon concluded that "different modes of perceiving may be partly a function of maturity, partly of social and educational background; but may also have some temperamental basis."[2]

Goins[3] used a Picture Squares Test and reported that the distribution tended to be bimodal. She noted that children who progressed rapidly on the test appeared to see the nine pictures within a square as a group while those who progressed slowly looked at each picture in the square separately until a pair could be matched. The test correlated .381 with a reading achievement test at the end of grade one.

Using the Rorschach Test, Gann[4] found that poor readers were preoccupied with unimportant details. Solomon[5] reported a similar tendency among boys who were poor readers, while successful readers overemphasized the theoretical and abstract aspects of the Rorschach.

Thus, a number of studies at the primary grade level lead one to suspect that some children tend to be "whole" perceivers while others tend to perceive "parts." Undoubtedly the majority of pupils change their patterns according to the task, the "set" or motives. The nature of the studies also raises an interesting question concerning the etiology of the differences in perceptual types; that is, are differences due to personality as suggested by the Rorschach, or due to experience in the preschool years. Perhaps, as Vernon suggested, a developmental pattern may be found.

In a recent study of 448 pupils made by the writer,[6] the coefficient of correlation between the Picture Squares Test and of first-grade scores on the Metropolitan Reading Achievement Test was .411; by the end of Grade two, the coefficient was .329 and at the end of grade three, .221. The decrease in coefficients may reflect maturation, or a change in the demands of the reading process.

## Middle Grade Level

The Raven Coloured Progressive Matrices which, according to Raven, requires the use of perceptual and eductive abilities was used by Wickens.[7] At grade four, this test differentiated 25 good from 25 poor readers with statistical significance ($P = .02$). Whether largely perceptual or conceptual, the differences on this test were clearly demonstrated.

Examining the remainder of Wickens' data dealing with abstracting ability in the light of the whole-part relationships, a marked and highly significant difference ($p < .05$) between the good and poor readers was found between the Word-Grouping and Figure-Grouping subtests of the Primary Abilities Test, Elementary Form AH. In this instance too, the unification of the parts into a whole, with attendant relationships was exceedingly difficult for poor readers.

At the grade four level also, Jay[8] used 35 reading tasks, correlated the scores and completed a factor analysis of the intercorrelation matrix. She concluded that classifying words may be an essential task in reading. While some children could read the words, still they had trouble classifying them, and in proportion to their decreasing reading scores.

At the fourth-grade level, there is evidence of a tendency toward differences in the ability of selected pupils to deal with wholes and parts, again closely related to competence in reading.

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[1] Frank Smith, "An Experimental Investigation of Perception," *British Journal of Psychology*, VI (February, 1914), pp. 321-62.

[2] M. D. Vernon, *A Further Study of Visual Perception*. London: Cambridge University Press, 1952, p. 250.

[3] Jean Turner Goins, *Visual Perceptual Abilities and Early Reading Progress*, Supplementary Educational Monographs, No. 87, Chicago: University of Chicago Press, 1958, p. 63.

[4] Edith Gann, *Reading Difficulty and Personality Organization*. New York: King's Crown Press, 1945.

[5] Ruth H. Solomon, "Personality Adjustment to Reading Success and Failure," in *Clinical Studies in Reading II* (Helen M. Robinson, Ed.) Supplementary Educational Monographs, No. 77. Chicago: University of Chicago Press, 1953, p. 81.

[6] Unpublished.

[7] Alice R. Wickens, "The Ability of Good and Poor Readers to Abstract." Unpublished Ph.D. dissertation, University of Chicago, 1963.

[8] Edith Sherman Jay, "A Factor Study of Reading Tasks." Unpublished Ph.D. dissertation, University of Chicago, 1950.

### High School Level

A study of 30 high school seniors made by Smith[9] reveals some distinct differences in the way students read. She asked each student to read one selection to secure the details (parts) and a parallel selection to obtain the general impression (whole). Questions dealing with both aspects were asked after the reading of each selection was completed. Thereafter, all students were ranked from 1-30 based on the answers to the questions in four categories. Some of these students consistently read the selections for details, others for general impression, regardless of the purpose proposed by the investigator. A good reader, for example, ranked second and fifth on questions of general impression, but seventeenth and twenty-sixth on questions requiring details. In contrast, another good reader ranked first and seventh in answering detail questions, but nineteenth and twenty-fourth in obtaining general impressions. Among the thirty students, eight consistently favored reading for details or for general impression while the remainder varied their approaches.

### College Level

An intensive study of 39 college freshmen made by Swain[10] was concerned with the verbalized process of answering questions about materials read during the experiment. Although her sample was small, it included good, average, and poor readers. One of the dimensions she adopted to examine her protocols was called analysis of language (when the language form seems to be the crucial element) and restructuring of meanings (when the meaning stimulated by the language is the chief consideration). She found that analysis of language typically characterized a few of the poor and average readers. In contrast, restructuring of meanings was used by good readers, especially in answering questions which were more difficult, and was used less by poor readers. While this classification resembles some aspects of whole-part relationships, the nature of the classification is not as clear as it was in the previous studies.

On 74 perceptual tests administered to fast and slow readers at the college freshman level, Thurstone[11] found that the fast readers were quicker than the slow readers in identifying dotted outlines. Likewise, fast readers were form-dominant and made quicker decisions on the color-form sorting test. In contrast, the fast readers were slow in discovering hidden digits and had a greater number of failures than the slow readers.

### Summary

Vernon and others have postulated perceptual styles emphasizing whole or part perception. Several recent studies of visual perception among children in the primary grades have supported the conclusion that whole perceivers tend to learn to read more effectively than do part-perceivers. However, the possibility that the pattern persists into the conceptual domain is suggested by a few investigations of reading beyond the level at which perception is the dominant aspect of reading. While most students appear to be flexible and able to move from wholes to parts as their purpose dictates, it is possible that others at the extremes of the dichotomy rely heavily on a single perceptual and conceptual style. Only longitudinal studies over a number of years can test this hypothesis. Should it be confirmed, then obviously rigorous analysis of the etiology of each type will suggest the possibilities of change, and/or the necessity for adapting instructional methods to individual learning styles.

## 6. Reading Rate Improvement—Fad, Phantasy or Fact?

GEORGE D. SPACHE

AS YOU SEE, I added a subtitle to the topic assigned for this occasion. I am deeply concerned about the services being offered by some so-called "reading clinics," "reading schools," and in various reading kits and devices. Like Stanley Soles of San Francisco State College,[1] we wonder whether some of these are legitimate quasi-educational enterprises or exploitation of the public and of reading teachers by educational quacks.

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[9] Helen K. Smith. "Research in Reading for Different Purposes," in *Changing Concepts of Reading Instruction* (J.Allen Figurel, Ed.). New York: Scholastic Magazines, 1961, pp. 119-22.

[10] Emeliza Swain. "Conscious Thought Processes Used in the Interpretation of Reading Materials." Unpublished Doctoral Dissertation, Department of Education, University of Chicago, 1953.

[11] L. L. Thurstone. *A Factorial Study of Perception*. Psychometric Monographs, No. 4. Chicago: University of Chicago Press, 1944.

Some of you may feel that my use of the term quacks is completely unwarranted, for some of these reading services and devices are offered under the sponsorship of reputable persons or business firms. Let me then define the term "quack" as one who promotes a technique or treatment which claims to bring about desired changes in a person's condition, knowing full well that research evidence does not support such a claim. Using this definition as a point of reference, are some reading services and devices quackery? Let me quote some of their advertisements and perhaps you may judge for yourself.

> Meticulous study habits are quickly formed. It does not permit sloppy performance. Reading skill and comprehension are significantly improved. Frustrations are eliminated because students are able to advance at a rate compatible with their own ability. Personality conflicts are eliminated . . . (This technique) does not permit a student to comprehend only 75, 80 or even 95 percent of the subject matter. The student must comprehend 100 per cent of the subject matter.

This material is found in the advertisements for a programed course in study skills for secondary pupils.

Here is another quotation from the ads for a home reading kit:

> Any individual working alone and making use of the simple devices and the practice material provided can be sure of success. Price $61.75.

It may be interesting to note that the first three or four lessons in this how-to-do-it reading course are devoted to teaching the subscriber how to count his eye-movements while reading—and, of course, thus reduce those nasty regressions. The program was so successful in sales to adults that a similar course is now being offered to young people. It offers one set of exercises to meet the needs of a seven-grade range.

I have used this next quotatión several times in speaking of questionable reading services and perhaps you will recognize it. The name of the sponsor has changed somewhat but this statement is still in use.

> The Better Reading Program claims: Ten minutes with the patented Phrase-O-Scope in our Rapid Reading Kit will save you 10 percent of your reading time, daily, thereafter. . . . Each lesson (of 10-15 minutes) adds another 5 percent or more, so in less than 20 days you'll gain at least 100 percent in speed—while comprehension grows as well.

Let me close this series of revolting citations with this final tidbit.

> Many learners have increased their skill and ability to the extent that they read ordinary material with complete comprehension at from 5,000 to 15,000 words per minute and devour study material at from 2,500 to 5,000 words per minute with satisfactory comprehension and complete retention of the material read or studied.

This particular quotation has been used by a number of reading services that use such names as Speed Reading, Reading Dynamics Institute, Vertical Reading, National Reading Institute and others. Think of what such a course could do for *you*. After only a few weeks of training in learning how to turn the pages fast enough, you could read the average novel in less than a half hour "with complete comprehension" and perhaps the complete works of Shakespeare in *just one evening*.

The rapid development of programed materials and teaching machines will undoubtedly be reflected in an increased number of programed reading improvement courses. Soon we may expect to have programs that will teach our children all that they need to know about reading with "absolute control of students at all times" and "guaranteed comprehension and retention of every unit of material." Picture, if you will, the future reading classroom in which by a combination of these twin marvels of programing and speed reading, pupils will probably cover all the curriculum of the elementary school in a few weeks of real application "with complete retention of the material read or studied." If you call yourself a reading teacher or reading specialist, my advice would be to seek some other line of work in the very near future. You will be superfluous in the accelerated, dynamic classroom of the future.

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[1] Stanley Soles. "Educational Quackery External to Our Schools: What is a Professional Response?" March 1963, p. 299-302, *Phi Delta Kappan*.

Listen, for example, to the advertisement offered with a programed teaching device for reading improvement.

> After scanning just the first Programed Reading Roll, you will immediately notice sharp increases both in the rate at which you read and in the amount you understand and remember.

Space allotted to this paper does not permit a lengthy presentation of the known facts about the outcomes of reading training that would refute these inflated claims. My viewpoint might be summarized in this series of statements, which I believe are firmly supported by the available research:

1. Rate improvement is not possible or desirable for all pupils; nor does any known device or method produce increases in speed for more than about two out of every three trainees.
2. There is no such entity as general improvement of rate of reading.
3. Much practice in present-day classrooms intended to increase rate is completely unsound.
4. In view of the lack of a universally acceptable definition of comprehension, the results of most experiments in rate improvement cannot be interpreted scientifically or even objectively.
5. If we define reading as "reading most of the words on the page," it is literally impossible to train any person of any age to read faster than 800-900 words per minute.
6. Any type of rate training which attempts to induce students to read only portions of the material cannot claim to be teaching reading, as defined above.
7. Any type of training which claims to teach readers to read in phrases, or in structural units of any size greater than one word in each fixation is quackery.
8. Rate training does not necessarily result in improved comprehension, for faster readers are not always better or more comprehending readers.
9. Some students need rate training which would result in slower rather than faster reading.
10. A disturbingly large proportion of those individuals given rate improvement training not only fail to improve, but actually read worse than before the training.
11. We do not know how to discriminate those students who would be helped by rate training from those who might be harmed. In view of this, it is unethical to offer rate training to a group of persons without first attempting careful, individual diagnosis of their present condition and future potentials in the areas of vision, reading needs, and verbal abilities.
12. Rate training cannot be offered apart from special attention to comprehension and word attack skills. Speed is not independent of these other aspects of the reading process.

# PART III SEQUENCES

## SEQUENCE I READING IN THE CONTENT FIELDS

## A. ELEMENTARY SCHOOL

### 1. Essential Types of Reading in the Content Fields

GERTRUDE WHIPPLE

SUCCESSFUL guidance of content reading is impossible unless the teacher has a knowledge of the structure of the particular school subject. He must know the specific concepts and generalizations to be promoted in that subject.

For example, a description of Switzerland in an elementary geography is not intended to teach the industrial and other processes described, but rather to promote the principle that a people living in a country with few natural resources can make a good living by importing raw materials and exporting finished articles. New England is another region that exemplifies this general principle. Detailed facts are quickly forgotten; but knowledge of the fundamental principle can aid the pupils in reconstructing the details and in interpreting life in other areas that show similar man-land relationships.

Another requirement for good reading instruction is that reading be used as a medium of learning only when it is the most effective method of achieving the teaching purpose. Obviously, if some other medium such as taking a trip or viewing a film would be more productive, reading ought not to be used. A further requirement is that the book employed should be the right one for the particular pupils; if they have low comprehension, the time spent in reading an inappropriate book will be excessive.

Let us now turn to the question: What are the most fruitful types of reading to attain the objectives of the content subjects?

#### Oral Reading Versus Silent Reading

Oral reading has limited value as a means of learning, for the rate of oral reading is less rapid than the rate of silent reading. And yet a common practice consists of having children take turns reading aloud from their textbooks. Under this slow oral method the listeners tend to view the content as bits of specific, detailed information rather than to grasp the broad ideas.

Some types of oral reading, however, can function in the curricular areas: pooling pertinent information on a topic from newspapers, magazines, pamphlets, and books; reading orally to prove or disprove statements; giving others instructions, directions, or announcements; combining oral reading with speaking or speaking from notes; and oral practice for participation in a play, a radio program, or a dramatic dialogue. Oral reading has special value in teaching the semi-technical words and phrases in that it tends to increase the reader's experience in using the words and the listener's experience in hearing them spoken.

The teacher's main problem in guiding oral reading is to motivate it and to develop standards of accurate reading, effective emphasis, and ability to convey meaning and feeling to the listeners.

#### Skimming

Silent reading is especially useful in the content areas. The types may be classified on the basis of speed of reading and the kind of thinking involved. The most rapid type is skimming; that is, the reader glides quickly over the text without reading it carefully.

A reader uses such scanning chiefly for locational and survey purposes. He hunts up topics in an index, words in a dictionary, articles in an encyclopedia, or maps in an atlas. He may look for certain words on a page such as references to animals, or mountains, or for information in answer to a question. He uses survey skimming in examining a chapter to see its general organization and what sections, if any, apply to a given problem. Or he may skim a chapter for review purposes.

Since skimming saves much time and energy, children should be taught to use this technique when it is appropriate. They must learn to keep in mind just what they are skimming for. In the early learning stage, children often revert to continuous reading at their customary rates.

### Cursory Reading

Cursory reading occurs when one reads as rapidly as he can to get an overview of a selection or the main ideas. He skips over difficult words and minor points, but he does read in more detail than when skimming. Cursory reading is especially important when the reader must deal with a lengthy selection preparatory to careful reading.

Other uses of cursory reading are: to comprehend simple directions for an experiment; to review ideas to be used in a dramatization, a report, or a discussion; to check one's memory of ideas; to formulate questions to be asked of others or to be answered by careful reading; and to sample books to see if one wants to spend time reading them.

In view of the large amount of material that the well-informed adult must read today, it is imperative that children increase their speed of reading through practice in cursory reading.

### Assimilative Reading

Assimilative reading means abstracting what the author has to say. This kind of reading is concerned with literal meaning and does not go below the surface to implied meanings. Unlike cursory reading, assimilative reading is not hasty or neglectful of details.

The child may carry on cursory reading to get facts or to follow explicit directions for an experiment or a do-it-yourself project or to find out what travel folders say about a foreign country. The teacher may use the facts and literal meanings in developing thinking abilities through discussion.

The teacher's main problem in developing assimilative reading ability is to discourage attempts at rote memory. It should be impressed upon the children that repeating the words without understanding is of little or no value. The teacher should show the children how to test themselves for the recall of ideas.

### Critical Reading

Critical reading is the slowest kind of reading because it is reflective. As described by Sterl Artley, critical reading "is an active process of reflecting with care on the ideas expressed, of making a rigidly exacting analysis and, as a result, arriving at a valid conclusion."[*] This, the slowest and most difficult type of reading, requires freedom from personal bias and a background of experience against which new ideas can be evaluated.

There are many situations that call for critical reading. In social studies, pupils need to compare the points of view in one editorial with those expressed on the same topic in other editorials; to analyze historical material to see the connection between events so that they can draw inferences; to solve simple problems by assembling pertinent facts, classifying and comparing them, and reaching reasonable conclusions in light of the facts. In perusing literature, pupils should interpret the motives and emotional reactions of characters in order to understand their behavior.

Unless the teacher helps children to develop a critical attitude toward what they read, they are not likely to do so. If the teacher asks them to read to the bottom of a certain page in a history book or to complete the next chapter in a science text, they will do little else than superficial reading. If the teacher's questions tend to call chiefly for facts, children will not engage in reflective thought. They need help in formulating reading purposes that demand critical reading within their abilities. Such purposes stress the *how* and *why* of events as opposed to the

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[*] A Sterl Artley, "Critical Reading in the Content Areas," *Critical Reading: An Introduction*, 14. National Council of Teachers of English: Champaign, Illinois, 1959.

*who, what* and *when.*

### Summary

To advance children toward maturity in reading in the content fields, the following points deserve consideration in instruction: (1) Reading should be used only when it is the most effective medium for the purpose. (2) Real reading is idea-centered rather than fact-centered. (3) Real reading can be promoted only if the teacher has a knowledge of the structure of the subject. (4) Various kinds of reading ought to be used to further the goals of the content subjects, as opposed to one or a few patterns of reading.

## 2. The Specific Reading Skills Necessary for Social Studies in the Elementary School

JEAN I. CAUDLE

THERE IS a close relationship between the reading skills common in the teaching of reading and the specific skills necessary in the content areas. In the social studies content, the reading skills necessary for effective understanding are much more complicated than the skills found in the basal reading materials. Children require guidance in the varied ways to use the specific skills in the present curriculum of our elementary school. Pupils cannot be expected to read with understanding in the content area unless they are competent in many of the essential reading skills.

### Word-Analysis Techniques

As children are required to read more and more in social studies, it becomes increasingly important for them to learn how to recognize new words without the aid of the teacher.

### Comprehension of the Common Vocabulary

A good general common vocabulary is necessary for the pupil to gain academic success in the social studies. The child experiencing difficulty in the basic sight vocabulary will have problems in understanding the content.

Some reading skills which must be adapated to the specialized nature of the social studies material and the unique purposes for reading in this content field are the following:

*The method used to recognize the way the material is organized.* The ability to organize material is important for the development of effective independent study. Many clues are provided by authors to equip the pupil for better sequential organization ability.

*Efficient ways need to be developed for comprehending the technical vocabulary.* A technical vocabulary will be achieved only through planned instruction on the part of the teacher. A direct and planned technical vocabulary does not just happen as a part of the basal reading program. It is encouraging to read how teachers are assuming more and more the responsibility for direct teaching of the technical terms in social studies.

*The student needs to adjust the rate of reading to the purpose.* The student who is flexible in the reading rate will have increased comprehension in reading. The nature of the content will determine the rate of reading. The teacher will find that instruction and practice in this area will be profitable.

*Locating and evaluating information is a valuable tool.* The child who is able to use the index of a book will find it valuable to develop this skill. Children's newspapers are a good source for the evaluation of information. Children frequently find this a good source of current information and sometimes more complete than a social studies text.

*Satisfactory comprehension of the material read is essential.* Pupils showing good comprehension in the basal reading text might not be successful in comprehension in the social studies. Teachers are aware that social studies should be given special attention.

*Ability to see relationships that are stated or implied is very important.* Practice should be given in finding the important as well as the unimportant information in a particular situation. Skill needs to be developed in finding what is essential to a given portion of information. In certain areas of social studies, time may be indicated through dates. In other areas of the social studies, the answer may be suggested through implication. The cause and effect relationship is very important and a student should have directed reading to develop this ability. The student should be able to raise questions not specifically answered by the writer, but with some reading between the lines get a satisfactory answer.

*Ability to organize ideas is to be developed.* This is another area in need of special training. The ability to bring material together from various sources is of importance. The development of an outline is an effective way to achieve good organization. A good sequence of the events as they happen is important in organizing ideas.

*Ability to follow directions needs proper guidance.* One of the effective ways to learn to follow directions is to develop a good sequence of the task to be accomplished. This should improve with experience in this kind of assigned task. The activity assigned should be of high interest to the child. The student able to select the significant details is frequently able to develop in the ability to follow directions.

*Effective use of reference books is an important reading skill.* The ability to read various kinds of maps is an important skill, and the interpretation of charts and graphs is also helpful. The encyclopedia is becoming a part of the classroom instructional equipment and is recognized as an important learning tool in the home.

## 3. Teaching Reading Skills in the Content Fields — The Art of Questioning

HELEN WARDEBERG

READING SKILLS can be developed and improved through the skillful use of questions, both before and after reading is done. The importance of developing vocabulary and concepts necessary to read a piece of printed material has been well established. The backgrounds and experiences pupils bring to the content fields are frequently overlooked. For instance, the culturally advantaged child in today's society often has high verbal facility, and talks easily and glibly. Skillful questioning is needed to identify the level of real understanding such a youngster has, the precision of his concepts, the value of his experiences as shared with others in the class.

On the other hand, the disadvantaged child may not be able to contribute this way. But he, too, has experiences! Sometimes he has a practical knowhow; sometimes personal knowledge of how it feels to be hungry, cold, abandoned! He may not have the appropriate "school" terms to talk about it, but his experiences can be of great value to others. Children of today have vocabulary, knowledge, concepts that would have been impossible in an earlier time. Our questions should be phrased to explore with pupils experiences that are relevant to the material, to identify and make more precise the terms that will be used, and to set meaningful realistic purposes that will personally involve the reader.

Questions also direct pupils to think about what is read. Thinking does not take place automatically; questions can lead our pupils to be better thinkers and thus better readers. Professor R. H. Ennis of Cornell is doing exciting research in critical thinking, defined as the "correct assessing of statements."[1] He states that a critical thinker is characterized by proficiency in judging such things as whether a statement follows from the premises, something is an assumption, an observation statement is reliable, a simple generalization, a hypothesis or a theory is warranted, a statement is overvague or overspecific, and so on. Professor Ennis does not include judging of value statements, or treat creative and other types of thinking, but he recognizes these are important and probably cannot in practice be separated.

While critical thinking is rather universally considered to be a good thing, we have been handicapped by a lack of any really sound delineation of the specific aspects of the critical thinking process. Evidence so far indicates that we can indeed teach the process of critical thinking and that probably children are capable of critical thinking at early ages. Even at this stage in Professor Ennis' research, we can get some leads for formulating questions that may develop this critical thinking power. The examples such as he cites will help us to formulate questions within the criteria he has identified for judging statements, adapted to the maturity level and to the subject matter. If indeed the process can be taught, then the use of skillfully devised questions based on reading and on listening will be an increasingly important technique.

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[1] Robert H. Ennis. "A Definition of Critical Thinking," *The Reading Teacher*, 17 (May, 1964).

One other guideline to effective questioning is the need to help students to understand the basic nature and structure of the various disciplines. For example, in history, one is not as concerned with the questions of "who, when, where," as with the question of "why." If our questions lead pupils to develop the concept or structure of history as a compendium of names and dates, then we have not practiced the art of questioning true to the nature of the discipline of history. Similar examples can be derived from geography, science, economics, and so on.

To summarize, then, the art of questioning to improve reading skills includes attention to at least these qualities: 1. Questions that relate new ideas to the child's experiential background and personal involvement. 2. Questions that develop critical thinking and the correct assessing of statements. 3. Questions that integrate the structure of the disciplines in such a way that future learnings as well as past experiences can be encompassed in the structure.

## B. JUNIOR HIGH SCHOOL

### 1. Teaching Reading in the Content Areas: Some Basic Principles of Instruction

H. ALAN ROBINSON

CONTENT area teachers often shudder when they are told that "every teacher is a teacher of reading." They think of themselves usually as teachers of a subject and not as teachers of the skills of reading. And they are correct!

Reading skills cannot be separated from content. Any attempt to teach reading without utilization of the content materials within the curriculum defeats the purposes of instruction.

The improvement of reading ability is part of the content area curriculum, for the acquisition of reading skills becomes the acquisition of power within the content area itself. Content area teachers should, therefore, be concerned with at least the following basic principles of instruction.

1. *Establishing readiness for reading and studying a chapter, book, article, or selection improves understanding.* In making a reading assignment, the content area teacher should focus the attention of the students on what is to be read through (a) relating their past experiences to the reading, (b) developing key words and concepts that students will meet in the selection, and (c) establishing purpose(s) for the reading.

2. *Students should be helped to develop study techniques applicable to specific content area reading, and should be guided in the application of such techniques.* Certain techniques such as SQ3R[1] may be applied, with necessary modifications, to several of the content areas. Individual students and teachers may develop a variety of other functional study plans in relation to specific content. The concept of SURVEY, PREVIEW, or OVERVIEW is essential, however, to all plans. The student who takes the time to "think through" the reading prior to actually studying it will find himself better able to cope with the ideas presented. This "thinking through" should not be a hasty, mechanical skimming but a careful consideration of the title, opening paragraphs, headings, concluding paragraphs, italicized or bold print words and phrases, pictorial material and captions. The student should be encouraged to relate his past experience to the material and to set purposes for study.

3. *Common reading skills initially introduced elsewhere should be constantly*

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[1] Francis P. Robinson. *Effective Study*, Revised Edition. New York: Harper & Brothers, 1961. Note especially chapters two and three.

*and consciously reinforced in the content areas.* Such a common reading skill as RECOGNIZING MAIN IDEA, for example, is best cemented when applied in furthering the understanding of content materials.

4. *Specific reading skills, particularly pertinent to a content area, should be introduced initially by the content area teacher as the need for using certain skills with the content materials becomes evident.* Introduction and reinforcement should be consciously designed. READING A CIRCLE GRAPH, for example, is a skill most logically introduced when it is needed in a content area such as social studies or mathematics.

5. *When only one basic text is available for a class, it is vital that the teacher differentiate assignments.* There should be at least three levels of assignments—for the retarded reader, the average, the above-average—with differing degrees of complexity and a variety of purposes.

6. *Whenever possible, multilevel materials should be utilized.* Attempting to meet the needs of individual students through the use of multilevel materials and differentiated assignments places a heavy responsibility on the content area teacher, but offers opportunities for more extensive and intensive accomplishment by individual students.

7. *Students should be aware of and develop skill in recognizing the particular patterns of writing used in each content area.* Practice in recognizing such patterns as CONCLUSION-PROOF, PROBLEM-SOLUTION, QUESTION-ANSWER, and CAUSE-EFFECT will aid in the understanding and retention of ideas met in content area materials. Writing patterns should be explored at both the paragraph and selection level; patterns particularly applicable to specific content areas should be studied while using the pertinent content area materials.

8. *A classroom library related to each content area, containing materials at various reading and interest levels, should be accessible for all students.* Such libraries are additions to, not replacements of, school libraries. Students can often be motivated best to read books related to a content area "on the spot" rather than at another time. Teachers need to be familiar with the books in the classroom collection; the collection ought to change from time to time. If teachers must move from room to room, a rolling cart, or a few books carried by the teacher or assistant, may be an alternative. Possibly the best motivation for a reluctant male reader may come through the physical education teacher (with a small collection of sports books housed in his office) who says, "I just read a book about Mickey Mantle and it's terrific!"[2]

## 2. Teaching Reading Skills Through Literature

ELLSWORTH S. WOESTEHOFF

STATEMENTS of the goals of literature study in today's schools invariably reflect concern for developing literary appreciation, enriching personal life, and building habits of independent reading. Only rarely is reference made to the use of literature as a vehicle for teaching reading. Yet, the continuing need for the development of a broad range of reading skills, abilities, and understandings exists at all academic levels.

There is understandable reluctance on the part of teachers to extend the function of literature study to the development of what have become identified as fundamental skills of reading. However, such duality of purpose is not incompatible with effective teaching-learning; in fact, on the basis of what is known of range in achievement, it may tend toward necessity.

Literature appears in a variety of forms, each of which presents unique as well as general reading problems. Rather than attempting a broad, general consideration of these problems, it would seem appropriate to consider one approach to a specific piece of literature. For this purpose, a six-step adaptation of a generalized approach suggested by Bond and Wagner[1] will be applied to chapter six of Mark Twain's, "Huckleberry Finn."[2]

*Step 1. Building Background.* The continuing narrative, particularly in terms of Huck's attempts to escape from the control of his father should provide sufficient background. Involved will be the reader's knowledge that Huck is alive and the belief of the townspeople that he is dead. In addition, there is the inner conflict between superstition and religion as illustrated by the quicksilver and bread "finding" Huck.

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[2] Gene Schoor. *Mickey Mantle of the Yankees.* New York: G. P. Putnam's Sons, 1958.

[1] Guy L. Bond and Eva B. Wagner. *Teaching the Child to Read.* New York: Macmillan Company, 1960.

[2] Mark Twain. *Huckleberry Finn.* New York: Harper and Brothers, 1948.

*Step 2. Presenting Vocabulary.* In this chapter, the actual vocabulary used should present few problems, since the words are drawn from the speaking vocabulary of two rather uneducated people. The basic problem involves conversion of dialect, unusual use of relatively common words, and colloquialisms. Most word recognition problems depend upon skill in use of context. For example, in, "I catched a catfish and *haggled* him open with my saw," the context is all revealing, whether the precise meaning be rip, tear, cut or slit.

Knowledge of letter sounds, dictated by simple phonetic principles plays an important part in the recognition of many dialect words, since Twain has made an effort to represent speech by employing basic letter sounds. In addition, there is the constant use of the apostrophe to indicate missing letters. Opportunities for instruction and practice in sound-symbol association are apparent.

*Step 3. Setting Purpose.* The initial purpose for reading this chapter should probably revolve around the continuing narrative. For the less capable reader, it may be necessary to separate the total chapter into the two basic episodes, setting separate purposes for each. For the more capable reader, emphasis may well be given to consideration of how the characters reveal their superstitious natures.

*Step 4. Purposeful Silent Reading.* Since time is a significant element, this should preferably be done as an independent out-of-school activity.

*Step 5. Discussion.* Obviously, this must be in terms of the pre-set purposes, although speculation concerning cause effect relationships or subsequent events may well lead to ancillary areas of study, such as a study of superstition or a more exhaustive historical consideration of the times.

In spite of its brevity and specificity, this approach may well prove fruitful, if only in the sense that for some teachers it extracts the first olive from the bottle. The intent is to show *a way* rather than *the way.*

## 3. Vocabulary Development in the Content Fields

ROSE BURGESS BUEHLER

OVER ALL THE world children are learning languages in cultural settings. Children imitate the speech patterns of people of importance to them, and meaning is communicated by tone of voice, pitch, and bodily gestures. Children learn listening and speaking vocabularies in social settings. The family culture in which a child is growing up and the social groups to which he belongs have a tremendous influence on his ways of perceiving word meanings in vocabulary, which in turn will influence his thinking and behavior. A word is limited in meaning without a context. Meanings are not in words but in the thinking of people. For example, the word "run" has multiple meanings in the following phrases: a run on the bank; the salmon run; a home run in baseball; and the river runs.

Each person uses several different vocabularies: a speech vocabulary used in conversation; a listening vocabulary when he responds to the spoken word; a writing vocabulary for communication with others; and a reading vocabulary when he reacts to printed symbols.

To insure vocabulary development in the content fields in the junior high school culture, which is related to the larger world citizenship of which the pupil is a part, the school program will need to consider his individual interests, ambitions, and academic backgrounds. Cultural tools and visual aids are needed, as for example: basic art materials; records and phonographs for student exploration in areas of listening (music appreciation); simple musical instruments to stimulate creative melodies and rhythms; maps, globes, films and film strips, and equipment to make slides; materials for writing and duplication for communication with others; magnets, batteries, and magnifying glasses; and an abundance of challenging, interesting paperback books, encyclopedias and other reference books, trade books, a variety of easy interesting biographies and autobiographies; magazines, bulletins on occupations and other interests; newspapers, news film strips, and other mass media; programed learning materials; and factual texts to promote international understanding with pictures that teach and explain without prejudice.

Film strips of current events are used to build habits of critical reading as well as daily reading of the newspaper. Weekly news film strips produced by the Visual Education Center, Laboratory Office in Madison, Wisconsin, introduce pupils to a careful study and critical reading of a daily newspaper, the various parts that make it up, its role as a source of news, and difference between news reports and editorials.

Moreover, in the content field of geography the development of such terms as high and low pressure areas, relative humidity, temperature, velocity, and rainfall are made meaningful in discussions of such mass media as the newspapers, TV, and the radio. In addition, weather maps used in the classroom demonstrate these concepts, and pupils learn to use the terms while "thinking geographically."

The mathematical vocabulary, such as, fractions, decimals, numerals, zero, equal numbers, Commutative Law, may need to be demonstrated for understanding through the use of a chalkboard number line. Understanding must be secured before concept development can be assured.

Observations made during field trips in the neighborhood, community, and interschool visits will promote the pupil's technical vocabulary concerning major work projects. He will develop basic concepts of transportation and communication, and conversation of natural resources; he will acquire too, a better understanding of other people and the contributions they make to our civilization. Extended tours with the family and individual trips taken by the student on his own initiative or by assignment with subsequent reports will prove valuable to the whole group. An imaginary trip planned and organized in the same way as a real tour, but visited vicariously by means of slides, photographs, maps, specimens, and film strips will again prove valuable.

Pupils gain many concepts about citizenship in the modern world and the resultant responsibilities as they participate in making group and individual decisions in the classroom, setting up standards of work, and in sharing responsibilities. These experiences in experimentation and exploration of effective group processes promote habits of listening, speaking, reading, and writing. Communication is a social process. When later the pupils meet the concept words, "democracy," "responsibility," "justice," in reading in the content fields, this vocabulary will be highly charged with meaning. William S. Gray once said, "When the pupil can see through the printed symbols to the meaning that lies beyond, it is similar to looking through a window and seeing the view without being conscious of the window frame."

The effectiveness of a sequential developmental program in vocabulary development in the content fields in the junior high school can be determined in part by observing the quality of improvement of pupils' oral and written work, their achievement of increased power over vocabulary difficulty, their successful work in independent reading periods, and their frequent enjoyment of books on an individualized basis.

## 4. Review of Recent Research in Reading in Content Subjects at the Junior High School Level*

EDWARD G. SUMMERS

CONCERN regarding the improvement of reading at the secondary level has been expressed for a considerable period of time.[13, 11, 27, 10, 4]

Even though concern for developing secondary reading programs has been expressed for a considerable period of time and scattered improvement programs have been in existence, the greatest growth in programs at this level has occurred within the last two decades. In the last ten years in particular there has been a virtual explosion of programs reported for the secondary level.[23, 24] Artley[1] predicts that when the history of reading instruction is written it will indicate that one of the major points of emphasis for the 1960's will be the organization and extension of developmental and remedial programs in grades seven through twelve.

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*Complete copies of the report can be secured from the author.

In a recent paper examining the nature and scope of developmental reading in secondary schools, Karlin[8] noted that more reading instruction is being conducted at the junior high school level than at the senior high school level. However, the scope and significance of reading instruction in grades seven, eight, and nine is really not known at this time. Although it is difficult to delineate specific trends a recent review of literature revealed the following methods of scheduling and programing to meet reading needs in junior high schools:[25] remedial and corrective classes, programs organized within a specific subject, programs conducted in a special laboratory or workshop, and programs conducted with single class groups of various types. Total school reading programs are not generally in operation and specific examples of junior high school programs which are *developmental* in the true sense of the term are rare. It is natural to encounter such diversity in an area where guidelines for instruction are still developing. In addition, as Sheldon[19] has pointed out, the unsettled nature of the junior high school as a means of curriculum organization contributes to the problem in developing reading programs. Few completely satisfactory programs which adequately emphasize teaching of reading in subject areas in the junior high school have been reported. The effective teaching of reading in subject areas is the real challenge in meeting the needs of junior high pupils. However, meeting this challenge presents a complex problem with needed research lacking on variables such as teacher training, correlation of subject objectives with reading objectives, provision of adequate materials, grouping for instruction, measurement and evaluation of outcomes, and establishment of guidelines for administration and supervision of programs once they are in operation.

The status of research in general in secondary reading has been examined by a number of authors including Harris,[5] Smith,[20] Strang,[22] and more recently, Schneyer.[18] The fragmentary nature of research, inconclusive results of studies, lack of coordination and poor control of studies have all been underscored by the foregoing authors. In the junior high school, in particular, Traxler[28] raised twelve questions related to the improvement of reading with tentative answers to the questions based on an admittedly scanty base of available research. Townsend[29] noted recently that there is an increased interest in research at this level, but that studies are still too few and varied to lend themselves to classification. In a later article, reviewing twenty studies on applied reading in subject areas, she concluded that most of the studies reviewed make suggestions for the improvement of practices which are not yet so tangible or detailed as one might hope for.[30] Although studies conducted at adjacent levels and studies conducted in developmental reading programs have relevance to the topic, this review will consider only recent studies of junior high school populations conducted within the context of various subject areas.

Following is a listing of pertinent recent research studies. Scarborough, Bruns and Frazier[17] reported a study conducted with three eighth grade groups in which reading materials and classroom assignments were differentiated according to reading ability. Reeves[16] described a program which attempted to correlate reading work given in eighth grade English with science and social studies assignments. Munro,[14] using seventh grade classes, attempted to determine the effect of differentiating assigned subject reading materials set up to present facts, relationships and generalizations. Jan-Tausch[7] indicated that concrete and abstract thinking are related to reading comprehension. Snavely[21] examined the effectiveness of purpose statements and marginal notes as aids to reading-comprehension. In analyzing vocabulary development Krantz[9] established a high relationship between reading ability and basic skills in the elementary school and success in interpretation of content material in high school.

Eicholz and Barbe[3] reported a study which explored modified programed learning as a technique for teaching a general core vocabulary to seventh graders.

Using the EDL Reading Versatility Test with over five hundred eighth graders Sister Mary Theophemia[26] concluded that the over all picture indicated a great lack of flexibility in reading and poor knowledge of how to adjust rate to various purposes and materials. Sister M. Herculone[6] attempted to determine whether or not pupils adjust their rate and technique in reading according to purpose. Witt[32] reported the results of a study, using two equated seventh grade groups, which examined the effect of two techniques to improve ability to conceptualize social studies material. Troxel[31] found that purposes set in reading will influence both speed and accuracy in reading mathematical materials. Curry[2] indicated that an experimental seventh grade group given Gates-Peardon Practice Reading Exercises during arithmetic classes achieved significantly greater gains in reading than a control group, but achievement in arithmetic was not improved. Ramsey[15] evaluated seven junior high subject texts in terms of readability, interest appeal, and conceptual difficulty. Miller[12] examined the readability of junior high school industrial arts textbooks and the reading ability of students using them.

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## C. SENIOR HIGH SCHOOL

### 1. How Much Does a Content Teacher Need to Know About the Teaching of Reading?

OLIVE S. NILES

HOW MUCH does a content teacher need to know about teaching reading? One way to approach this question is to remember the difference between a good reading teacher and a good content teacher—both teaching reading.

The reading teacher's reasoning is like this: "These students need help with skimming—or some other skill. We will work directly on this skill until we have made some progress." The skill comes first in this teacher's thinking. He doesn't care what the content is so long as it is interesting and suited to the maturity of the students.

The content teacher who understands how to teach reading reasons otherwise: "This is today's lesson in our text. As I examine these pages, I see a chance to help students divide some of these difficult words into syllables, or read these two paragraphs for their key ideas, or. . . ." The content comes first. The skill or skills to be taught *depend on the nature of the content.*

Both teachers are right. Not enough effort has hitherto been given to understanding the content teacher's approach.

The fact is, however, that most content teachers don't understand this or any other approach to teaching reading. If they get one look at the long lists of reading skills, they often panic. Perhaps reading consultants will accomplish more in working with these teachers if they attempt less. There are six lessons—not easy lessons, to be sure—which provide a foundation from which a good content teacher can begin to develop as a good content teacher of reading.

Lesson one is a brief description of the reading process, just enough to help teachers understand that reading must be broken down into specific skills if it is to be taught.

The second lesson is about vocabulary: recognition and meaning. Secondary teachers of content subjects need some specific approaches to word study. For example, it is easy to show them that all multisyllabic words fall into four groups so far as pronunciation is concerned. They need to teach students how to attack each type of word. It is also easy to demonstrate the usefulness of context and structure clues, both of which help students to gain independent power over words.

Lesson three concerns the directed reading lesson approach to textbook study—or, if the students are mature enough, the SQ3R. SQ3R is nothing but a grown-up directed reading lesson. This is the point at which, hopefully, content teachers will realize that content and reading skills can be taught simultaneously and that, indeed, they *do* have time to teach reading.

The fourth lesson has to do with the use of the library for research and for enjoyment. Single-textbook teaching is as outdated as the Model-T. Teachers must realize their role in the selection and use of library materials. Most teachers agree that they want students to read in depth. Many do not seem to know that depth is not possible without breadth.

In lesson five, teachers are helped to become constructively critical of their textbooks. They need help in using their present textbooks more efficiently and in choosing new ones which will actually help them to teach reading as well as content.

Lesson six attempts to give teachers further insight into the complexity of reading. At this point they enjoy discussing some of the skills most important in their own subjects. The more hardy teacher will respond to a suggestion that he specialize—select a skill he feels is particularly important and learn to be an expert in teaching it. No one content teacher needs to undertake to teach all of the skills.

Visualize what would happen in a secondary school if *all* content teachers—taught vocabulary with emphasis on power, not memorization of lists,, taught efficient textbook study, fully cooperated in a library program, and specialized—each teacher for himself—in just one reading skill which he could teach extremely well.

The theory that every teacher should be a teacher of reading in the secondary school is sound. What is essential is a much simpler, and at the same time a more sophisticated, procedure for involving content teachers in techniques which they can learn without great effort and use immediately.

## 2. Rate of Comprehension in the Content Subjects

JOHN A. VINAGRO

"RATE of Comprehension" has been selected to describe speed of reading, when learning is the primary goal, rather than relaxation, enjoyment, information, and emotional release." Content Subjects" include all secondary school classes as opposed to the conventional definition whereby subjects in which the acquisition of information or knowledge as in history, geography, science and civics are generally the only ones included.[1] Flexibility is one reading skill that all secondary school teachers may stress to improve rate of comprehension in the content subjects.

### Need

Reading all materials in the same manner wastes energy and poses the possibility of poorly accomplishing or never finishing the task. Most teachers assume that pupils recognize this. Consequently, they feel no need to teach flexibility. Research, however, shows that many readers tend to develop one speed of reading and that they proceed to read everything at that one speed.[2] Furthermore, this inflexibility is acquired early, around the third or fourth grade. Going even further, they find it hard to change when they are told to do so, as research has shown that direction to students to alter manner of reading does not produce desired rate changes.[3] Content subject teachers need to emphasize flexibility.

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## Problems

One-speed reading and an acute need to reread develop at a crucial time. Somewhere about the fourth grade, reading material becomes highly specialized in subject content.[4] Effective comprehension in the higher grades necessitates application of study techniques requiring adjustments previously considered bad habits. Regression which detracted from enjoyment now contributes to reinforcement. In addition to rereading, spending more time on the important and less on the unimportant through rate variation becomes increasingly helpful.

## Advantages

Studies indicate that variation in reading speed affects comprehension. By distinguishing between situations where speed tends to facilitate comprehension as opposed to those occasions where slowness tends to correlate highly with understanding, teachers may improve rate of comprehension in the content subjects. Trends in the research suggest that speed tends to be helpful on narrative[5] and easy reading materials,[6] while higher comprehension is usually associated with slower reading in mathematical material.[7] The fact that unanimous agreement is lacking[8, 9] serves to emphasize the importance of individual differences and provide occasion to mention when speed is useful on all types of material. Speed can be utilized to aid comprehension in certain aspects and types of reading in all school subjects. Previewing an assignment and acquiring additional facts through collateral reading are supplementary procedures.

## Principles

Each academic area involves special vocabulary and comprehension skills, and no one is more familiar with these abilities than teachers who have specialized in the subject.[10] A large part of secondary reading instruction should be provided by content subject teachers. This teaching should reflect at least three principles gleaned from trends in reading research. First, speed should not be emphasized in specific materials of certain subjects nor in low ability classes. At average and lower intelligence levels, slower readers tend to be more efficient.[11] Secondly, reading all materials in a course at one speed should be discouraged. Introducing varied materials to be read for different purposes is one procedure to prevent one-speed reading. Other techniques are skimming for a single idea, noting relationships between main points, and using reading as a springboard for thinking and creative writing.[12] Finally, an awareness of certain conditions which prohibit work in speed should be developed. Retardation in areas of word recognition, vocabulary, and comprehension precludes speed development.[13]

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## 3. Some Useful Classroom Practices and Procedures in Reading in the Content Fields

GWEN HORSMAN

READING INSTRUCTION is needed in virtually all classes which deal with subjects in the content areas, especially in the first year of such courses. New vocabularies and concepts are difficult for the capable readers as well as for the less competent readers. Many teachers who recognize this fact are at a loss in helping students to gain in reading power because they have not been subjected to courses in *methods* of teaching. A review of some practices which have helped to eliminate reading difficulties in the different fields of instruction may prove helpful to these teachers.

A careful and thoughtful examination of the textbook goes a long way in helping to capture the interest of students who are studying in a particular field.

a. look at the pictures—talk about them
b. discuss the table of contents—notice the organization
c. discover the author's style of writing—his viewpoint
d. observe the format of the individual chapters
e. anticipate the vocabulary to be met—examine the new words
f. notice charts, graphs and maps—how informative are they?

The above procedure requires several class periods of examination, but usually results in a more successful experience of consideration and study of the text.

Accompanying this oral attack on the text, or following it, can be written exercises which are challenging and stimulating.

a. Students studying the chapter headings can list questions they think will be answered in the text, types of problems they think will be solved, and issues they feel will be discussed.
b. Making a written list of the words they already know which are unique to the particular subject-matter field often helps to remove difficulties in reading and stimulates an interest in the text.
c. Spotting those chapters which they anticipate will be most interesting, listing these with related readings, helps students to recognize relationships between the text and their everyday lives.

An excellent practice for encouraging a continuing interest in the text is to suggest to students that each obtain a notebook which can be used to parallel the learning which is gained from the text. The notebook can be divided into several sections:

a. the newly acquired vocabulary
b. the reading skills necessary for maximum interpretation of the text
c. questions to which a student wishes to learn the answers
d. newly learned facts
e. books and articles which relate to the reading in the text.
f. a committee of students can be assigned the task of making a class dictionary, using the words and phrases listed by individuals in their own notebooks.

In a classroom situation where a group of students are unable to read the assigned text the teacher can suggest group reports where the more capable readers report on those sections of the text which are too difficult for the less capable to master. The slower readers can be assigned reports from books secured on lower reading levels but related in context to the subject at hand. In this manner all the students are contributing to the learning that is taking place but each on his ability level.

For those students having trouble with textbook reading, assignments can be made in the following areas:

a. map making
b. graphs and tables
c. construction of scenes
d. designs of costumes
e. collecting of appropriate pictures.

A well-planned, carefully designed program of outside activities will go a long way in keeping all of the students interested in the textbook which held little promise at the start of the school term. When the classroom teacher recognizes the many levels of abilities and the varied areas of interest, individualized assignments can be made which promote academic and personal growth.

In many content areas it is not essential that *all* of the students read *all* of the text. A course can be planned which requires a minimum amount of reading from the text, where only the less difficult sections of the book are studied.

For average students the text may be presented in the traditional manner, covering the regular course, as designed. For accelerated learners, a vast amount of research work can be planned which falls outside of the classroom text, such as reports, debates, and panel discussions. This procedure precludes the giving of a single test or examination to the class; several different kinds of tests will have to be prepared for these students if they are to be tested and marked on what they studied.

When students are measured only by themselves the matter of *grading* the members of this hypothetical class will not be difficult. They will simply be marked on individual growth and development. In this way education considers the individual and his welfare.

## D. COLLEGE

### 1. The Relationship of Reading in Content Areas to General Reading Ability

ALBERT J. KINGSTON

CONTINUED interest in the development of reading abilities in late adolescents and in adults has resulted in numerous investigations of the reading process at the college-adult level. Research studies range from investigations of eye movements and other perceptual aspects, through the effects of lighting and typography, to the relationship of personality and emotions on the reading process. Although such research has helped us gain some insights into the reading process, it must be recognized that many fundamental questions are still unanswered concerning the manner in which the human organism functions in perceiving and comprehending graphic symbols.

The reading specialist whose major concern is reading behavior at the college level holds an unusual position in the professional community. His work often cuts across a number of academic disciplines: education, psychology, linguistics, and counseling to mention but a few. Moreover, the college reading specialist often attempts to utilize many of the theories, research findings, and pedagogical practices developed by his colleagues who have specialized in the investigation and teaching of reading at the elementary grade level. In many cases the insights borrowed from related disciplines have helped the college reading specialist to focus his thinking more clearly, but occasionally the borrowed constructs merely serve to confuse or cloud the issue. The problem of reading in the content area which faces this group today may represent the latter situation.

Although the elementary school reading specialist faces a real task in helping pupils to extend and refine basic reading skills and even to develop a few additional skills as they begin to read more widely in the physical, biological, and social sciences or in literature and mathematics, it is questionable whether the same problem confronts the college reading teacher. A basic assumption of all reading instruction is that what is learned in the reading lesson will transfer to innumerable other reading situations. Obviously the child is not taught fundamental reading skills merely so he can read identical or similar patterns of words in other basal readers. It is patently absurd to think that reading is taught merely so a child can read basal readers with greater proficiency. A major goal of reading instruction is transfer. Certainly the reading tasks demanded by the modern elementary and secondary school curriculums represent a primary situation for testing the transferability of what has been learned in reading instruction. At the college level furthermore the bulk of a student's reading will be in the so-called content areas. Moreover, the typical college student already has demonstrated the transferability of skills and abilities in reading or he would have been unable to master the necessary preparatory program in the secondary school. This transfer includes not only skills, but also understandings, attitudes, and other complex behavioral components.

The complexity of reading behavior at the college level creates additional problems. One major difficulty is confusion regarding the nature of any variance found in each so-called content area. Studies of the relationship of reading in a specific subject area to general reading ability reveal significant positive relationships which may range from +.40 to +.70. It seems likely that both the patterns of identity and variance found in such investigations reflect complex cognitive and personality components. The psychological set, intellectual capabilities, ability to manipulate language and to reason are essential components which affect the reading behavior of a college student. Efficient reading skills are dependent upon the student's motives and attitudes, his language, rate of association, ability to order information in logical and sequential order, and the extent and variety of the constructs he has which relate to the materials he reads. These attributes reflect complex personality and cognitive components and are poorly differentiated and little understood.

Generally the typical college reading program is ill-equipped to help students develop or alter qualities. Unless the college reading specialist provides better methods for diagnosing and understanding the complex cognitive behavior of his students, it is likely reading improvement techniques will remain at a superficial level.

## 2. Teaching Drama and Fiction to College Students

WILLIAM S. HASTINGS

IN MY teaching of literature at Purdue I have found that there are some common approaches to serious literary work, whether it be poetry, drama, fiction, or non-fiction prose. These include interpretation of the work through analysis of character, action, symbols, ideas, and so forth. The author's implied or stated intention is also important, as is his success in achieving his purpose. But since my topic for discussion is limited to drama and fiction, I shall simply note that the above considerations are pertinent and pass on to special problems posed by these two literary forms.

First, with respect to drama. I strongly believe that the use of imagination in visualizing setting and background is of major importance to a student in understanding a play. Many college students have seen few plays, and they are likely to regard drama as mere spoken fiction. A play is written first of all to be performed, and lacking an actual performance, the best substitute is a careful reconstruction of the author's stage directions, his descriptions of settings and characters, and his sometimes subtle changes in setting throughout a play. The performance of a play is so important that some playwrights, for example Tennessee Williams and Arthur Miller, question whether a play should be taught as literature at all. In the "Afterword" to *Camino Real,* Williams says, " . . . a play in a book is only the shadow of a play and not even a clear shadow of it." And in his introduction to his *Collected Plays,* Miller writes:

> . . . it is necessary to separate drama from what we think of today as literature. A drama ought not to be looked at first and foremost from literary perspectives merely because it uses words, verbal rhythm, and poetic images. These can be its most memorable parts, it is true, but they are not its inevitable accompaniments.

The one-dimensional set of *Death of a Salesman* illustrates what I mean: in the kitchen there are a table, three chairs, a refrigerator—but no stove. The rest of the stage is also sparsely furnished. This physical bareness possibly compliments the incompleteness of Willy's life. In *Beyond the Horizon,* as the failure of Robert's and Ruth's lives and marriage is developed, the drab farmhouse becomes seedier and seedier. Seeing *The Emperor Jones, Rain,* and *Darkness at Noon,* the theatre audience cannot help being aware of background effects—the tom-toms, the steady down-pour, and the hammering of the prison code—but in reading the play the student must make a concentrated effort to imagine their effect. In the first scene of *Hamlet* the direction reads merely, "Elsinore. A platform before the castle." We learn that it is the midnight changing of the guard, but without imagining the very dark setting it is difficult to understand the hesitation regarding the ghost. One could cite examples like these from almost any play intended to be performed (I am not speaking of "closet drama," which is closer to narrative poetry), but one further illustration may point out another use of the physical aspects of drama: the contrast between the rich man's house and the poor man's in Galsworthy's *The Silver Box*.

The student in a drama course, then, should approach a play much as a scene designer, director, and actor in the theatre do: he should try to form detailed visual images of what the author has expressed in words. (Incidentally, a useful assignment in a drama course is to ask students to block out sets, indicating props and action.)

This use of the imagination in picturing places and characters is also helpful in understanding prose fiction. How many readers of *Tom Jones*, however much they enjoy the gusto, the pictures of eighteenth century life, visualize the scene in all the marvelous detail of the current film? In the Zanuck version of *The Grapes of Wrath*, the scene showing the reflected images of the worn-out Joads in the windshield summarizes one of Steinbeck's major points: the triumph of determination over exhaustion.

The second point I like to stress to my students in drama and fiction courses is the prevalence of conflict, which is more necessary to these forms than to poetry or non-fictional prose. I doubt that any readable, successful play, novel, or short story lacks this element. You just can't have an interesting work of this kind without a fight. *Tom Jones* has about thirty fights, all of them uproarious. *Don Quixote, Lear, Macbeth, Hamlet* are full of conflict. These surface conflicts—or fights—are of course obvious; much less so are the subtle struggles between and within characters in the novels of Henry James, E. M. Forster, Marcel Proust, and Virginia Woolf, or in such plays as *The Three Sisters* and *Long Day's Journey into Night*. If students can at least partly project themselves into the characters of the commonly acknowledged great novels and plays, if they can understand what makes these characters do the things they do and say about others what they say, their enjoyment and understanding of the works will be much improved. The real trouble seems to be that their own experience is so unlike that of, say, Hamlet, Raskolnikov, Ahab, Isabel Archer or Regina Giddens, that it requires a determined effort of the imagination to understand these fictional characters as living people.

## 3. Useful Classroom Techniques for Reading in the Content Fields at the College Level

STANLEY P. WEISSMAN

THE IDEAS and techniques that I shall attempt to develop are based on the premise that we are dealing with the "mildly corrective or developmental" type college reader.

There are four prime "targets" emphasized in assisting my students to improve their comprehension power in the various academic areas. These are: 1. Increasing the student's familiarity with his own textbooks through the use of the table of contents, preface, etc. 2. Assisting him in gaining greater insight into the material and the setting of realistic study purposes through the application of the SQ3R technique. 3. Developing the skill of quick recognition of the main thought in a paragraph and distinguishing this from the supporting details. 4. Developing an awareness of the vocabulary peculiar to each individual subject area and strengthening the student's ability to incorporate these words into his speaking vocabulary.

In terms of having students become familiar with their own books, I feel they should know the title of the text, who wrote it, and when was it published. In addition they should ask themselves: Why is it important to know something of the academic background of the author? Why is it important to know when the book was published? What is the value in reading the preface and table of contents? Of what importance is browsing through the book noting its structure, size of type, presence or absence of illustrations, chapter summaries and questions by the author at the end of the chapter?

Great stress is placed on the application of the SQ3R approach to learning. To me, there is no better way to develop one's awareness of subject material, to determine strengths and weaknesses in that particular area, and to set realistic goals for learning than the mastery of a technique such as SQ3R. Through this, a student learns to view the total assignment, and at the same time, see the parts that constitute the whole. This approach is developed in the classroom by using the student's textbook, teacher-prepared materials and workbooks such as Cherington's *Improved Reading Skills in College Subjects.*

The ability to grasp main ideas quickly and to distinguish them from supporting details is a third consideration in improving a student's comprehension of text material. Rather easy material is used initially and, as the skill is enhanced, transfer to the student's own text is effected. Every effort is made to assist the student in understanding the author's plan. The question "What is the author trying to tell you?" is constantly asked. As part of the training in this area, students are reminded to be on the alert for key words, such as *however, consequently, finally, therefore,* and *because of,* since they may show some shift in meaning.

By selecting material found in the student's own text, I can easily show both the need and importance of a good general vocabulary and knowledge of the "language of the course" in particular. Until a student has acquired the faculty for handling the vocabulary in a given subject, he will never really master that subject. The stress is placed on learning these words in context, and if a word list is to be kept, it is done by writing the exact sentence in which the word was found. In this manner, word learning is meaningful.

These are but four approaches that I use with my students. Certainly they are not the panacea, but in my judgment, a sound basis for improving comprehension.

## 4. Student Preparedness for Reading in the Content Fields

SISTER MARY JULITTA, O.S.F.

MUCH INTEREST is being shown and research directed toward improving the reading of aspiring, as well as enrolled, college students in order to meet the demands of college courses today. Basic reading ability and emotional factors involved in attaining success, as well as the special skills suited to each subject field, have received considerable attention. However, the factor of preparedness or readiness for reading in curricular fields has received little emphasis compared to its importance. Rather, preparedness seems to be accepted as existing by virtue of entrance into college.

### Direction

The first element of preparedness is *direction* or purpose which refers to either the established goal of the person's total educational endeavor or the specific goals for particular subjects or assignments. Only when these goals are definite will there be the inner determination to work toward them. This is aptly stated by Garrison addressing aspiring college students, "It is not an exaggeration to say that your present need to figure out *what you want* and *why* is perhaps the most significant challenge of your college career. *Wanting* is a prime motive power for anyone."[1] It is only when the student sees his reading in relation to his overall goal that the instructor's goals become meaningful and he reads to find out rather than to "satisfy the teacher."

### Thinking Patterns

Although direction is the springboard, there must be active thinking as the very essence of the reading act. This thinking must be orderly if the student is to think through his readings and glean organized knowledge from the printed page. Is it possible to assist the student in reading for the main ideas, to see the organization of a chapter, and finally to take notes in an organized manner if he is confused in his thinking generally? Instead of succeeding in relating ideas according to time or causal relationships, the student with confused thinking habits may finish his reading with fragmentary ideas (many details in mixed order, as a young child may relate ideas without thought of association). He fails in actual understanding because true interpretation comes from weighting the ideas within the total setting and making the proper associations. Again, if he is trying to scan for several pertinent items, he finds it impossible either to retain the items for which he is scanning or to make the associations necessary in selecting pertinent points.

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[1] Roger H. Garrison. *The Adventure of Learning in College.* New York: Harper and Brothers, 1959, p. 61.

### Language Development

Closely related to thinking is the verbal development of the student. No thinking can be precise unless the vehicle of ideas —language—is precise. Thinking and language are related and reinforce each other. When the student must interpret such a term as *freedom,* he requires precise meanings; again, when he is reading through involved sentences and longer paragraphs, he must be able to note the relationships involved. Certainly, it is difficult to assist a student in reading this type of material if his spoken or written language betrays fragmentary thinking by use of short sentences or complex sentences connected with inappropriate connectives.

Basic to both the language and thinking aspects is mental content identified as "M" by Carter in referring to the need for background of experience and reading.[2] To bring meaning to the printed symbol, it is necessary to bring personal knowledge and experience to the reading. It may be necessary for the student to read and get first-hand information before he is ready to understand his textbook.

### Flexibility

Another necessary factor within the individual or in his background for success in reading is flexibility in thinking and in manipulation of ideas. Constant emphasis is being placed on the use of varied skills to meet the needs of different types of reading and different purposes for reading. However, the student who is rigid and inflexible in his total personality will find it difficult, or even impossible, to change quickly from skimming to intensive reading within one selection as the need arises, or to read for particular details in one section and for general significance in the next section. When receiving instruction which involves flexibility, the rigid type of individual would become frustrated.

### Work Habits

Finally, there is the very important aspect of work habits for success in meeting reading demands. It requires persistence to read through lengthy reading assignments, as well as concentration to continue intensive thinking in the reading act, and to follow through the printed page in an orderly fashion. If the individual has failed to develop these particular habits before entering college, he may find the burden of reading beyond his powers even though he has excellent reading power as far as skills are concerned.

### Conclusion

In providing guidance to students in improving their power to meet reading assignments efficiently during college years, it is not enough to assist the student to acquire reading skills and direct him in how to read, but it is necessary to observe important aspects of readiness for adult reading tasks.

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[2] Homer L. J. Carter, "Mental Content, A Contributing and Concomitant Factor in Reading," *Problems, Programs and Projects in College-Adult Reading,* Eleventh Yearbook of the National Reading Conference. Milwaukee, Wisconsin: The National Reading Conference, Inc., 1962, p. 26.

# SEQUENCE II NEW TYPES OF CLASSROOM ORGANIZATION

## A. ELEMENTARY SCHOOL

### 1. Three Kinds of Grouping in the Same Classroom

CLIFFORD L. BUSH

TODAY'S mass education requires grouping of learners for instruction; it is a means to facilitate learning rather than an end in itself. Grouping can be justified by turning to psychological theory—the complex skills of reading consist of a large number of separate learnings, responses to different stimuli brought one-by-one to the foreground of attention however brief the occasion may be.[1] Good teaching provides the opportunity for each individual learner to experience the desired response. It is for this reason that the criteria for grouping are numerous and constantly changing. Examples of such criteria are motivation, innate learning capacity, speed of learning, progress in listening and writing. Methods become (1) changes in spatial arrangements, (2) topical organization or learning tasks referred to as curriculum, (3) varying materials of instruction, (4) temporal, or the planning of the day's program, and (5) changes in methodology of instruction.

We, as adults, like to read, sometimes for recreation, sometimes for information. When did you first realize you like to do research-type reading? Your enjoyment undoubtedly stems from experiences you had in your formal schooling. Let's examine three types of groupings which help to realize this goal.

#### Type One—Total Class

Some objectives of the reading program can be effectively obtained by class participation as a unit. The teacher reads a story, poem, or play to the class with enthusiasm primarily for pleasure, although it may occasionally serve another purpose such as the introduction of a unit of study. The teacher gives a demonstration to build a common experience on which to base further learning experiences or create a new concept. The teacher conducts a directed reading period in order to create a purpose for reading. A test is administered to derive a specific grouping as a next step. A student reads to the class a selection he especially likes or one he has written himself. A fun story should be a regular part of the class's reading program. These are limited examples of total-class procedures.

#### Type Two—Instructions in Specific Skills

This grouping is artificially imposed by the teacher to help pupils with common learning needs, preferably developmental rather than remedial in nature. It should be a constantly changing structure as needs arise, not a permanent "Robins and Bluebirds" fixture. Alice Keliher has stated: "I call this Grouping-by-People."[2] A group of four children needs help in a specific vocabulary approach. Five need some experience in adapting their rate of reading to the material and purpose. Ten need experience in using source materials for location of information. Three need practice in getting the main idea from a paragraph. A major criterion for division into groups is the need of certain youngsters for simple, concrete experiences versus the needs of others to progress more rapidly to abstract, complex experiences calling for originality and creative efforts.

#### Type Three—Individualized Reading

When the learner is ready to progress

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[1] National Society for the Study of Education. *Theories of Learning* and Sixty-Third Yearbook, Part I. Chicago, Illinois: The University of Chicago Press, 1964, p. 348.

[2] Alice Keliher, Distinguished Service Professor, Jersey City State College, Jersey City, New Jersey.

at his own rate the teacher and he institute his own tailor-made program accompanied by frequent evaluation. The learner is encouraged to follow his interests, develop new interests, engage in work-study reading, and extend his own potentialities. Since this is an informal procedure the teacher goes to the learner instead of his reporting to the teacher. Self evaluation is an important part of this process with guidelines established in discussion with the teacher. The learner keeps his own records and seeks help as he needs it. This assumes that the teacher is aware of his progress, is guiding him in his choices so that teacher and pupil are closer together rather than the pupil leading the teacher. It seems trite to mention that a wealth of materials and a skillful, knowledgeable teacher are prerequisite to success with the individualized reading process.

### Summary

Good teachers begin the year by scheduling the first two types of grouping and gradually move into the third. Soon an overlapping, flexible grouping including all three permeates the reading program. An autocratic teacher cannot succeed in such a program; there must be the highest degree of human relations including warmth, freedom, friendliness, and cooperation so that self-discipline and responsibility are a part of the learner's behavior.

Publishers are cooperating with a variety of materials such as basal readers, classmate editions, readiness readers, parallel readers, trade books, and children's newspapers. There are many skill-building sources: *Reader's Digest, SRA Reading Laboratories,* programed materials, and children's encyclopedias and dictionaries.

Teachers must know and demand good reading materials. This can be done only if we frequently consult our educational journal book reviews, published lists by our own IRA, The National Council of the Teachers of English, The American Library Association, The Association for Childhood Education, The Child Study Association of America, and the latest books on children's literature. We should also plan some time in our busy schedules for the preparation of teacher and pupil-made materials; we might use newspaper articles, riddles, anecdotes, pictures, teacher-pupil messages, and children's stories done on a primer typewriter and placed in an attractive pupil-made cover.

The foregoing represents a plea to remove the learner from his passive role in the classroom and bring the teacher and pupil to an active cooperative learning behavior. We may thus come closer to challenging every pupil.

## 2. Team Teaching at the Elementary School Level

HARRY C. HENDRICKSON

AMONG the innovations spreading across the educational scene is the concept of team teaching as one of the answers to the improving of instruction and learning. Specialists in the field have developed several definitions of the term. John I. Goodlad[1] sees it in this fashion: "Team teaching basically is an arrangement that provides for having two or more teachers, with abilities and skills that complement each other, assume joint responsibility for directing the learning activities of a group of students."

Because team teaching has been in practice for so short a time in so few communities, conclusive evidence of its effectiveness has not yet been accumulated, and several forms or variations of teams are in existence.

According to an NEA survey,[2] team teaching is definitely on the increase as one of the leading trends in elementary education. In 1956 only five per cent of elementary school principals reported some use of team teaching; in 1961 this figure had climbed to fifteen per cent. Nearly one-third of the elementary school principals expect to have some degree of team teaching by 1966.

### Baltimore City—1963-64 Survey

The Bureau of Research has made a survey of persons who have participated in team teaching in the Baltimore City

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[1] John I. Goodlad, "Toward Improved School Organization," *The National Elementary School Principal,* Yearbook XLI, December 1961, p. 115.

[2] National Education Association, *The Principals Look At the Schools,* A Working Paper Prepared for the Project on the Instructional Program of the Public Schools, April 1962, pp. 17, 40.

Public Schools. Approximately one-third of the respondents replied that formal evaluation had been made of pupils' progress, the majority of these reporting comparisons with the pupils' former performance, and several having compared the progress of pupils taught by the teams with that of pupils simultaneously taught in groups not under team teaching.

A larger percentage of teachers reported having conducted an informal evaluation of pupils' progress, and the results of the informal evaluations were also favorable to the team plan of instruction.

Chief among the cited disadvantages of team teaching were the increase in work load, amount of time demanded for meetings, additional record keeping required, and encroachment upon out-of-school time. Some of the criticisms had to do with the hampering of an individual teacher's creative abilities.

However, respondents were much more eloquent on the subject of the advantages than they were on the disadvantages to teachers in the team teaching organization. Chief among these advantages were the benefits derived from cooperative planning, sharing of methods and materials, general exchange of ideas, and cooperation in evaluation. Next in order was the opportunity for professional growth.

Nearly all the respondents indicated that reading and language arts were major areas of team instruction. Some interesting comments were made relating specifically to the teaching of reading. One person reported that formal evaluation of instruction showed that team teaching of reading was decidedly superior to traditional instruction, while for social living it was superior to some extent.

Several administrators reported favorable reactions to team teaching both as an aid to pupil instruction and as a device for the strengthening of inexperienced teachers. Others stated that the group planning made possible through the team organization enabled teachers to supply better enriching and remedial experiences in reading. New teachers, in particular, learned how to identify skills needed by various children, how to introduce a new story or book, how to give a word recognition test, interpret results, and group children more effectively. It was felt that the team organization gives support to the experienced teacher and results in better planning, sequence, and continuity for the learning program.

### Summary

National trends indicate a continued interest in team teaching. Studies, both formal and informal, are generally favorable to team instruction as a means of providing more individual instruction of high calibre, of utilizing combined strengths and special aptitudes of several teachers, and of assisting inexperienced teachers to develop good instructional techniques more rapidly than under the individual classroom procedure. Some disadvantages have been noted regarding the necessity of rigid scheduling, difficulty of knowing a large group of children well, and the fact that team membership requires suitable personality traits and may hamper individual initiative and creativity. Definitive studies are not yet available, and more experimentation and evaluation are necessary before final judgments can be made.

## 3. Room of Twenty

MARY JANE McDONALD

ROOM of Twenty is a type of school organization for reading improvement. It is so named because twenty reading retardees are assigned to the room.

The pilot study was started with five teachers by Dr. William Kottmeyer, founder of the nationally famous St. Louis Reading Clinics. He felt strongly that a teacher with reading clinic training, using phonic techniques, selected materials, and not restricted to a time allotment schedule for various curricular areas, could help children who had not achieved third grade skills. This was the basis for its organization.

In the St. Louis Public Schools, pupils of the ungraded primary are classified by levels in the basic skills. They receive instruction at the level at which they are in each area, no matter what their placement. These levels are defined in terms of skills, and children who achieve the skills of the final primary levels have no difficulty in handling fourth-grade textbooks. No matter how well planned an ungraded primary or a skills program is, there are some children who do not master the skills after three years of primary instruction. These pupils become candidates for the Room of Twenty. Once children are assigned to a Room of Twenty, the *California Achievement Test* is administered. Scores from the test and an evaluation of skills achieved and to be achieved provide the remedial reading clinician with adequate data and background for forming small groups for instruction within the Room of Twenty.

A wide variety of remedial materials is available. Groups are given intensive phonic instruction, are free from time allotments, and have a curriculum stressing reading, arithmetic, spelling, oral and written communication skills taught by a trained remedial clinician. After twenty weeks of instruction, an alternate form of the *California Achievement Test* is administered. The average gain for one semester is usually one year. About one-half of the children of the Room of Twenty are ready after a semester to return to a regular room, equipped to handle fourth-grade material with success. It will take another semester for the remaining half.

Children in Rooms of Twenty usually have a wide age span. One explanation for the span is illness. Some children in the room have made frequent moves within the city, as well as from the city to the country, and have spent small and erratic periods of time in school. A loss of a parent through death or divorce during his early primary school years is often part of the case history of a child in the Room of Twenty. The reasons for reading disability are many and complex. Children in the Room of Twenty show many disabilities. As a result of this, they may be extremely nervous, troublesome, or unusually quiet in a regular room, lack study habits, have a short attention span, lack enthusiasm, and in general dislike school.

Once the reading is adjusted to the child's level of achievement, he begins to acquire skills and begins to read. He gains confidence through successful achievement. For the first time he may get 100 per cent in arithmetic and he has a chance to answer the question or find the passage in the book. Now he is the star; he answers instead of day dreams. He stops fidgeting or falling off the chair. He receives praise for his contribution, his completed assignment. He spends his school hours working instead of just putting in time. The pace is leisurely and unrushed, but progress is continuous and directed. The teacher is concerned with achieving the lacking primary skills and with giving each child reading skills and techniques which will equip him to go into a fourth grade room and handle the material with ease and success.

Every child in the Room of Twenty profits emotionally, socially, and academically, some to a greater degree than others. The teacher sees and appreciates each child's success, and the *California Achievement Test,* administered again at the end of the spring semester, substantiates the academic achievement. These scores are used as a basis for placement in a fourth grade class. A Room of Twenty sanctions retardation of a semester or two depending on individual achievement. However, without the advantages of acquired phonic techniques, increased reading ability, acquired study habits, a child would be unable to cope with the mounting responsibilities of the fourth grade. A whole new world thus is open to him through books which probably would have remained closed.

## B. JUNIOR HIGH SCHOOL

### 1. Grouping Guidelines

D. A. BRIGGS

IT WOULD be rare indeed to enter an elementary school at random and not find within this school some type of grouping being done within each of the separate classrooms. Most frequently the reading lesson is taught to various groups of children, with separate and distinct materials for each group. Frequently the number of groups will be three, even if this number is too few or too many. Frequently there is some type of co-basal or tri-basal approach to reading, with the teacher dividing her time as best she can among the three groups.

In the junior high school the visitor would expect to see a departmentalized program with some type of homogeneous grouping operating within each separate grade level. Major subjects would be taught by different individuals and the children would most likely travel from room to room on a set schedule. If the visitor were in a rare school he might expect to see instruction being done on a block-of-time basis. Homogeneous grouping may or may not be a part of block-of-time instruction. Where block-of-time programs are in operation there is usually some place given to "reading" or "language arts." This time may be isolated or it may be in conjunction with English or social studies. Grouping for instruction becomes the province of the regular subject matter teachers.

All of the children cannot be taught from the same book. Likewise they cannot be successfully instructed by giving them a basal reader designed for junior high school use and having them read it as if it was a literature book. The children cannot be taught to improve their reading skills by reading this book at home and/or in their study halls. The presentation of the reading skills must be made in the same manner for these children as you would expect to see it made for children in the intermediate grades.

## Grouping Principles

There are four basic principles of grouping which must be considered in the establishment of a program which will meet the needs of all the children in any single ungrouped junior high school class.

### 1. *Flexibility in Grouping*

The first of these grouping prerequisites is that of flexibility. This means that there must be an opportunity for free movement of the children not only upward into a higher reading group, but downward into a lower group. In order to assure flexibility of movement the teacher must realize that certain students are capable of making progress at different rates of speed. Some will move rapidly within their groups and others will move more slowly. Original groupings which are adequate at the outset of the program may soon prove inadequate and outdated as skills are learned and progress is made in the assigned reading materials. Flexibility also means that in teaching specific skills it is not uncommon to find certain children excelling in some areas while they are poorer overall in others. It follows then that there must be some procedure established for having students work in different reading groups if different skills are being taught.

### 2. *Realism in Grouping*

The second basic principle to observe in grouping for reading instruction is that the groups must be realistic. They must be realistic not only for the teacher but also for the children. Many teachers recognize the fact that three is by no means a magic number for grouping purposes. Within the normal class situation where a teacher is called upon to deal with approximately thirty children at a time, three arbitrarily designated groups usually make the situation workable. In a heterogeneously selected class fewer than three groups will generally not lead to successful instruction of all the children. The establishment of more than three groups will usually decrease the overall time a teacher can spend with each student in his group and also make the control and basic planning more complex. Undoubtedly there will be students in the class who are either too poor or too good to be with one of the regularly established groups. In this situation there may be brought into play such devices as tutorial parings, partner groupings, or individual research grouping.

### 3. *Knowledge in Grouping*

The third underlying prerequisite is that of knowledge of achievement level. The teacher must know her groups and students, and the children must know where they are and what they are doing in relationship to the total group. The parents of these students should also have the same basic information. The most effective instruction in the junior high school may be achieved only if the children and their parents realize where they are, what they are doing, and where they are going. It is imperative that children be accurately informed by their teachers as to their reading ability and their relationship to their peers. This information need not be presented in a blunt, matter-of-fact form. It can be discussed intelligently and with honest appraisal given by the teacher.

4. *Purposes in Grouping*

This last basic premise for grouping is that the groups be purposefully arranged. At the very base of grouping we find differentiated instruction as the underlying reason for the group. If no differentiated instruction or skill presentation is done, the groups have no purpose and therefore have no reason to exist. Putting all the junior high students into different groups at each grade level and then utilizing the same reading textbook with these students but at different rates of speed will accomplish nothing by way of results. If the students are not reading at the precise level of the books chosen, it is impossible for them to be instructed, no matter how carefully and painstakingly the presentation is made.

The problem of teaching the junior high school student to be an effective reader is a major one. It is probably the most complex task facing the teacher, and probably the one which teachers are least prepared and least comfortable in doing. Grouping children according to their individual abilities is one possible answer to the problem. It remains for us to find a better one.

## 2. The Reading Specialist in the Junior High School

Jo Stanchfield

Modern life is characterized by the intelligent use of knowledge and the rewarding use of leisure time, neither of which is possible without the full utilization of reading skills. Our most precious human treasures, of heritage and of imagination, are to be discovered on the written page. Through his ability to read maturely, every youth should have the right to partake of these treasures of the past and present and to unlock those of the future.

### Need for the Reading Specialist

Reading authorities recognize that learning to read is a continuous, complex, developmental process, requiring the sequential refinement of skills at various levels of difficulty. No longer can reading be considered the mere pronunciation of words, nor even the simple understanding of the meanings of the words. To function effectively in the complex society in which we live, the reader must be able to appreciate the implications of the meanings gained from the printed word with all its ramifications.

For too long reading has been thought of as a basic skill to be taught in the elementary school, with the idea that once a student has learned the basic essentials he can advance completely on his own. Gradually, authorities in secondary education are coming to the conclusion that reading is not to be considered a separate skill to be learned in the elementary school, but rather that reading is a skill which must be studied and taught throughout a student's school life and even into adulthood.

### Organizational Patterns for the Reading Specialist

From observation and study of four large school systems in Southern California, the writer finds that three basic organizational structures emerge, although there is much overlapping of function within the patterns. The most common organization is that of the reading specialist or consultant functioning as a reading teacher in a classroom. The classes taught are usually listed under the English department and give partial credit toward completion of units in English.

A second pattern for reading instruction is that of the "reading laboratory" or "reading center." This consists of a special room with mechanical equipment in addition to the textbooks mentioned above.

A third pattern consists of a program in which the reading specialist works more or less in an advisory capacity to the regular classroom teacher. His role is that of giving counsel, guidance, and help with the diagnosis and correction of cases of reading disability.

In the organization of the reading programs in the junior high school, three types of classes are developed, each according to the varying needs of the students: "Basic Reading," "Reading Improvement," and "Power Reading." In some plans, the first two classes are grouped together under the name of "Remedial Reading" or "Corrective Reading"; the third class is also referred to as "Developmental Reading."

The "Basic Reading" classes are designed for those students who are three or more years retarded in reading ability, as well as for non-readers. The students must have an average IQ as determined by an individual test, and the class size is restricted to approximately fifteen. The work is highly individualized and is centered around oral conversation, vocabulary development, listening skills, and all areas of reading readiness.

"Reading Improvement" classes are designed for students of average or above-average intelligence who are from one to two years retarded in reading. Class size is limited to approximately twenty pupils.

"Power Reading" classes (also called developmental and study skills) are planned for pupils of above-average ability who are reading at or above their grade level and who wish to improve their skills of comprehension, critical thinking, retention, and speed.

### Varied Functions of the Reading Specialist

The person in charge of the reading program in the junior high school is, in effect, a specialist not only in the educational sense, but in the legal sense as well. That is, he is recognized by the board of education as one who has received special training and is doing work beyond the scope of the regular classroom teacher. To assure this recognition, some states, such as New York, have created a special credential for reading specialists. Because of a change in the credential structure in California, with a drastic reduction of the number of credentials, it is the responsibility of the hiring boards to select reading personnel with appropriate college preparation in reading.

The varied functions of the reading specialist stem from his responsibility not only to improve instruction in reading but also, on the basis of evaluative surveys, to develop new and better programs. In this latter area, he needs continuously to channel information to those in charge of educational policy, including the school principal, the superintendent of schools, and the board of education.

The reading specialist or consultant works with the classroom teacher in a variety of ways, depending on the teacher's college preparation in the teaching of reading, his experience, the quality of his teaching, his attitude toward change, and his receptivity to suggestions. The reading specialist develops pre-service workshops and conferences (preparatory to the classroom teacher's assuming a role in the reading improvement program), demonstrations with conferences beforehand and follow-up lessons afterwards, and regularly scheduled meetings and courses. Demonstrations for college and university teacher-training classes and the supervision of student teachers are also important contributions.

Counseling individual students and parents is another one of the varied functions of the reading specialist. Students must be helped to understand their problems and be shown ways in which they can help themselves improve their reading ability, both in and out of school. Parents need information about what the school is doing to help their son or daughter improve in reading and insight into what they can do to help.

### Future Role of the Reading Specialist

In the curriculum of the secondary school, the position of the reading specialist is a relatively new one. To enable the reading specialist to function at maximum efficiency in a rapidly changing society, continuous investigations and studies should be pursued in such areas as the following: teaching norms for reading classes; motivation of interest on the part of teachers in the program; intensifying incentives for the students; development of reading centers or laboratories; selective classroom book collections for independent guided reading; use of audio-visual materials; selection of professional materials for teacher workshops; use of outstanding resource people in the field of reading for in-service purposes; work with colleges and universities for better pre-service preparation of secondary teachers in the understanding of the reading process.

With the need for increased education to compete effectively in our highly technological and complex culture and with the tragic consequences of the high school drop-out and the jobless youth, it would seem that the role of the reading specialist in the junior high school should be greatly expanded and strengthened.

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## 3. An Experiment in Class Organization for High School Freshmen

OLIVER S. ANDRESEN

MOST educators recognize the importance of guiding students towards increasing independence as they mature. In light of this philosophy the freshmen class at the University of Chicago High School has been reorganized so that each ninth grade student is given the independence not only to choose some of the learning activities in which he will participate but also to reap the advantages or disadvantages of these choices. Specifically such a program is rich with possibilities for the advancement of reading.[1]

The reorganization of the freshmen class activities is called the Freshmen Project. Basically, the organization is as follows: Most of the freshmen at the University High School are required to attend regular academic classes only three days a week. On Tuesdays and Thursdays these students pursue activities of their own choosing. These activities are referred to as "options." All options are related to the four basic areas of study for freshmen—English, social studies, science, and mathematics—and are either formulated by teachers or students. In general, the nature of the options is that of silent, independent study, laboratory work, teacher-led group discussions, student-led "bull" sessions, work in the library, or work with special material resources.

Every Friday afternoon the freshmen in their homerooms receive a list of forty options. Each freshman chooses eight of these options which he will pursue on the following Tuesday and Thursday and indicates his choices on an IBM card. These cards are then processed through an IBM machine which not only prints an attendance list of those students who will attend each option but also analyzes each student's choices as the year progresses so that an overall evaluation of his choice of options is compiled. Teachers and counselors are given these data. A student experiencing academic difficulties can be advised to choose options in keeping with his needs; or if absolutely necessary, his specific choices can be vetoed by his counselor.

A premise of this project is that each content area teacher in the limited number of days per week will cover as much of the required material of his course as that of any high school teacher in the conventional five-day week. This concentration of required instruction does not seem to create hardships for most of the students involved.

The freshmen project opens up many

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[1] Directors of the project are Ernest Poll and Edgar Bernstein of the University of Chicago Laboratory Schools.

avenues for the advancement of reading at this level. A list of specific option titles will support this statement. Example options of a developmental reading nature are: Short Story Seminar, a different story discussed each week; Oral Reading, a means of both entertaining and of imparting information; The Dictionary as a Vocabulary Resource; and A Discussion of *Time* Magazine as a Resource for Information.

Example options of study-type reading are: How to Interpret Graphs and Maps; The Library as a Source for Interesting Studies in Mathematics; and Finding Reference Materials for Special Studies Projects. Some language arts options are: Short Story Writing; Punctuation Review; Word Origins; and Poetry Reading.

Also the services of the University of Chicago Reading Clinics are offered as an option.

Shortly after the initiation of the project some freshmen, at their own request, were returned to the conventional class organization of five academic class days per week. On the other hand, certain highly creative students progressed so rapidly with this independence that they were required to attend only one day of academic classes per week with four days for options. Most freshmen elected to continue with the initial program of two option days a week.

Of these three types of class organization, those students in the four-options-days-per-week program showed the greatest gains on the achievement tests at the end of the school year. Those students following the two-options-days-per-week program showed the next highest gains, and those students following the conventional five class days a week program showed the least gains. The directors of the project do not claim that these data substantiate the success of the project. In fact, conclusions concerning the project are incomplete. Yet, in the opinions of the majority of the freshmen, their teachers, and their parents, the project is a success because it not only allows for an enriched program of required subject matter but also promotes a growing sense of self reliance and mature judgment on the part of the freshmen participating in this type of class organization.

## 4. Can Organization Patterns Enable Us to Improve Reading Skills?

John McInnes

Ways of organizing for reading instruction today are less rigid than they have ever been. We face the possibility of changing classroom organization to facilitate better instruction. Basic to organizational pattern is a knowledge of students' needs. We must make a continuing and comprehensive study of these, using not only standardized tests, but also informal tests, open-book examinations and teachers' continuing diagnoses.

Large group instruction through team teaching and television provides a way of informing students about reading. However, practice in using reading skills comes about best in classes or small groups. Small group instruction provides opportunities to teach the higher level language skills. Children learn to define, explain, clarify, illustrate, elaborate their statements in discussing the novels they read. They learn to elicit this kind of language performance from each other. They look for definition, explanation, clarification, support of generalizations as they read critically. They attempt to use what they have learned when they write.

Individualized instruction is carried out in skill development and in the study of literature. In some classrooms, pupils reading different novels meet in small groups to discuss questions that apply to many books. Pupils working individually on skill-building material meet to discuss how skills can be applied to reading and writing generally. Individual assignments calling for preparation of papers related to novels being read help children collect, organize, present and evaluate information. Individualized work in reading should be closely related to discussion and writing.

It is our responsibility to continue to test organizational patterns for their instructional possibilities and limitations. We must continue to make organization serve instructional needs.

# C. SENIOR HIGH SCHOOL

## 1. Implications of Class Organization for Reading Instruction

LEO FAY

A STRANGE new jargon has invaded the secondary school under the guise of casting the image of the future. The ungraded high school, team teaching, automated programed instruction and computer-based conflict-free modular scheduling, are but a limited sample of the terms attached to innovations that promise to revolutionize secondary education. Underlying this dramatic change is a better understanding of the talents of our youth, sharper definitions of objectives, and a rapidly expanding body of subject matter. All three have affected organization of classrooms and instruction.

John Flanagan's[1] recent summary of the project TALENT survey provides basic information to better understand the recent challenges to our traditional patterns of class organization. He reports that 25 to 30 per cent of ninth-grade students already know more about many educational subjects than the average twelfth grader. Furthermore, the top 5 per cent of students can learn many basic items at twice the rate of the average student. On the other hand students in vocational schools make but little progress in the tool subjects of reading, writing, and mathematics from the ninth to the twelfth grades. These facts and the many others that Flanagan reports, leads him to conclude that the present organization of the secondary school "is not at all well suited to meet the educational needs of the individual student."

### Characteristics of the New Approaches

Facts such as these have lead to experiments utilizing team teaching, flexible scheduling, and the breaking of grade lines. Several experimental plans involving English programs have been described in recent issues of *The English Journal.* While there is marked variation from place to place the new organization plans have several characteristics in common:

1. Instruction in an area is planned and executed by two or more teachers working together.

2. The size of the instructional group varies in relation to the nature of the course and the needs of the students. For example, independent study activities may be provided for 1 to 4 students, small group instruction for 7 to 15, large group instruction for 50 or more students. With such an organization the basic concepts of a course may be presented to a large group; underlying meanings, implications and applications can be thoroughly discussed in small groups; independent study can be encouraged, and remedial instruction provided where needed.

3. The class periods are scheduled on a flexible basis. One school system builds its schedule around 15 time modules of 27 minutes each. Thus the duration of a class, like its size, can be determined by what is to be done. Lecture periods may be short while individual study and laboratory periods can be scheduled to provide adequate time to really accomplish something.

4. To maximize the use of the teachers' time and talents extensive use is made of the mass media such as educational TV and automated instruction, such as instructional laboratories, teaching machines, and programed materials.

5. As a result of the above characteristics the teacher is better able to see and guide the individual student as an individual.

6. The rigid lockstep of the traditional organization is broken by differentiating instruction and in some places dropping all grade designations, thus making it possible for students to select from a far wider range of subject matter at any time they are ready for it.

### Implications for Reading Instruction

These dramatic developments have several implications for instruction in reading.

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[1] John C. Flanagan. "The Implications of Recent Research for the Improvement of Secondary Education," *American Educational Research Journal*, Vol. 1, January, 1964, pp. 1-9.

1. A laboratory for skill development in reading and the other language arts is needed to provide individualized instruction in all of the communication skills. For reading, the laboratory would be concerned with:

- —the development of higher levels of efficiency in the basic skills of silent and oral reading.
- —the presentation and refinement of study skills.
- —the relationship between reading skills and the other language skills.
- —diagnostic and corrective services for disabled readers.

2. Teachers in the various subjects, as they direct the learning and research activities of their students will need to provide guidance in the selection and use of reading materials and in the organization of thinking appropriate to their subject matter. This is essential if a high level of literacy is to be accomplished in the subject matter areas.

3. Provisions must be made for the student to assume more responsibility for his own learning. Not all instruction can be provided directly by the teacher. Hence new types of instructional materials are needed that can be selected for an individual student on the basis of his specific needs and which he can use at a rate to provide optimum learning for himself. Many of the specifics in basic reading skills, the utilization of materials, study skills, and the reading of different kinds of content can be programed into self-teaching materials.

4. A program geared to challenge today's senior high school students at all levels of abilities demands reading resources that make typical library standards obsolete. Periodical, book and learning materials collections will need to provide a scope and depth of content far beyond what was considered satisfactory for many college libraries a decade ago.

5. The opportunities for the creative use of skills that the new plans provide should result in a significant increase in achievement which in turn will have further implications for the reading teacher.

## 2. Methods of Differentiating Instruction at the Senior High School Level

ROBERT KARLIN

An examination of reading achievement test scores for any grade in senior high school reveals marked differences in levels of attainment. A range of as much as eight years between the achievement levels of the poorest and best readers in the grade is not atypical. Not only are there differences in reading achievement levels within a grade but also differences in skill development.

The problem of how to meet the differences that exist among pupils in a given grade or class is one for which no perfect solution has been found. And there has been some confusion over the means of providing for individual differences in teaching reading. The issues involved deal more with organization than they do with methodology. Instead of all pupils reading the same selections, learning the same skills, or doing identical exercises, there is some variation in the instructional program to meet some of their differences in reading ability.

### Individualization in Reading Instruction

Theoretically, at least, individual instruction might be a preferred means of providing for differences in learning ability and achievement. Practical considerations, such as limitations of time and resources, have led many educators to advocate a combination of individual and group instruction as a means of meeting individual differences.

*Individualized Reading.* There is a strong movement in some quarters toward complete or almost complete individualization of reading instruction. Individualized reading is based upon the principles of self-interest, self-selection, and self-pacing. These principles are translated through an organizational pattern in which each pupil is taught reading on an individual basis.

From a large selection of books that are provided in the classroom each pupil selects one for personal reading. Novels, short stories, biographies, non-fiction, poetry and plays would be represented. Books would be selected also on the basis of the students' reading ability.

There are times during which the students are treated as a class. In these sessions books may be introduced to them by the teacher or persons who have read them. The teacher may use this time to teach a reading skill in which a number of students is deficient. He may devote the group sessions to any reading activity which calls for group participation.

One feature of individualized reading is the conference which each student holds with the teacher upon completion of a selection or book. It is during this conference that the teacher is able to become acquainted with the student's reading ability and reading tastes. Teacher and student may discuss the author and his work. Selected portions may be read orally by the student. Answers to questions which probe beneath the surface of the selection may be sought. Follow-up activities related to the reading may be advanced. The teacher may deal with some specific difficulties which the student experiences while reading independently or working with him. If other students were known to have similar problems, the teacher might delay instruction until a time when a group could be assembled.

*Differentiated Assignment.* Differentiation of assignments in reading textbooks and other materials has been suggested to teachers of all instructional levels as a means of meeting individual differences. Thus, all students in the group might read the same selection but would not be expected to attain the same levels of understanding from it. Poorer readers might be held responsible for literal meanings while superior readers would respond to greater demands. Assignment of different portions from the same selection is another form of differentiation. Contributions would be made in accordance with the students' ability to respond to the assigned material.

There are textbooks which represent different levels of reading difficulty, and students who are studying specialized topics in science or social studies may obtain information about them from these sources. The use of diversified materials as well as participation in a variety of activities are ways by which differences in reading ability may be met. The laboratory approach in which learning occurs through planning, reading, writing, and sharing and in which each student makes his contribution to group effort is conducive to this diversification.

*Multi-level Materials.* Some senior high schools have established reading programs which are individualistic in nature. These programs rely almost entirely upon commercially-available materials which are graded in difficulty and whose content covers different aspects of reading. These materials are designed to permit students to work independently at their own rate and level.

Each of these programs is designed to be used with a minimum of teacher participation. In fact, there is little for the teacher to do except in cases where students are having difficulty performing the tasks assigned to them. It is my opinion, however, that these materials in their present form can be used more effectively as *practice* exercises after the teacher has taught the skills than as instructional lessons. No amount of practice in reading situations where difficulties are present can replace the guidance needed for learning new responses to them.

It may be entirely feasible to develop materials for teaching some reading skills in such a way as to reduce or obviate the need for a teacher's guidance. Although there are no carefully tested programed materials in reading at this time, one organization is offering experimental programed units in contextual clues, phonics, structural analysis, comprehension skills, and vocabulary building. Other organizations are in the process of preparing programed reading materials which seem to have some promise.

## Grouping for Reading Instruction

Grouping for instruction is not a perfect means of dealing with differences in reading ability. It is an administratve device which permits the teacher to provide for differences in ways that would be impossible if the class were typically organized for teaching.

However, grouping for instruction merely to have students work in groups is hardly justification for conducting such a program. Students who learn poor work habits and participate in unproductive learning activities while working in groups would be better off as a class unit under the direct supervision of the teacher.

*Intra-Class Grouping.* Group instruction in reading may be organized on the basis of the pupils' instructional levels, their specific reading weaknesses or a combination of these. Many teachers who have had little experience with grouping within a single class find that group instruction proceeds more smoothly for them if it is organized around instructional levels rather than reading weaknesses. Pupils have common needs that can be met in this way.

The limits that are placed upon the number of reading groups within a class are governed by the ability of the teacher. It is obvious that the more numerous the groups the closer may the teacher approach the pupils' reading needs. However, the demands of good group teaching are such that it is unrealistic to expect all teachers to plan for and instruct a large number of groups.

Team learning has been tried in the intermediate grades with some degree of success. In team learning small groups of two or three pupils are organized on the basis of reading ability. After the teacher has taught a lesson the members of the team work together on materials that have been prepared for them. Although the teacher is available to work with the teams or individual members, pupils are expected to help each other with the assigned work.

*Inter-Class Grouping.* Some schools have been advocating a type of differentiated instruction in which several teachers participate. This pattern of organization is particularly suited to departmentalized teaching. Pupils are grouped on the basis of reading achievement and assigned to one of several sections in reading. Each reading section meets at the same time. If such a program were conducted in the senior high school, students from the ninth grade might meet for reading instruction with pupils from the tenth and twelfth grades. Grade lines disappear since pupils are assigned to reading sections according to reading ability. The effectiveness of this type of organization is increased by further grouping within each section whenever it is required.

A variation of inter-class grouping is the program in which a group of teachers form a sub-unit within the school organization. A number of pupils is assigned to the sub-unit and the participating teachers work only with them. One teacher is mainly responsible for the language arts classes in which reaching is taught, a second the science classes, a third the social studies classes, a fourth the mathematics classes. For each learning experience pupils in the sub-unit are grouped with those of similar abilities. The teachers work as a team in planning the reading activities of all the groups and integrate them into their subject areas.

The homogeneity of such sub-units is, of course, theoretical. Although the pupils of these groups have common needs that may be met by teaching them as a class, they are likely to progress more rapidly if less-gross measures are taken. Further grouping is recommended for teaching reading skills when only some members of the unit are weak.

### Summary

The problems of providing for individual differences in reading is not one which teachers can easily solve. No organizational plan, no hardware, no materials alone or in combination can solve the problem for us. Awareness and dedication are the ingredients we need to mix with knowledge if we ever are going to get on top of the problem. Efforts to deal realistically with individual differences in reading at the senior high level are long overdue. Let's try to meet our boys and girls where they are and help them achieve in reading to the extent of which they are capable. We can do no less.

## 3. A Plan for Low Achievers in Reading on the Secondary Level

GWEN F. JOHNSON

SINCE OCTOBER, 1960, Beaufort County District One has been involved in what is locally known as the Beaufort Reading Project. In the Beaufort Senior

High School, the emphasis was on involving all staff members and all students and that emphasis continues. The presentation in this paper is confined to the program for certain ninth grade students.

In the spring the junior high school sends to the guidance department of the senior high school test data and faculty recommendations concerning students who are to enter ninth grade in the fall session and who rank lowest in over-all reading achievement. These low achievers include students of lower intelligence levels and also pupils of higher intelligence levels who are not achieving to capacity. Approximately forty students are selected for two sections with which this phase of our reading project is concerned.

The two periods of block time are centered around social studies and English with emphasis upon reading improvement. The time is often divided into four parts: (1) free reading, (2) English, (4) directed reading, (4) social studies. At times the social studies class time may cover directed reading and "English." Each part may last from twenty to twenty-five minutes or longer if the situation merits.

The free reading time is just what anyone would expect. The reader is free to choose his material to be read. In order to make this possible, an adequate classroom library of multilevel materials is necessary. The subjects and reading levels are varied and when used often enough bring rich rewards. Students keep daily records of what they read and, along with the teacher, set up goals that they are likely to meet. Informal discussions, "chat" sessions, and "buzz" sessions lend variety, interest, and information. The teacher must accept, encourage, and appreciate the student at face value and exhaust all measures to create within him a reading spark that will kindle into a fire.

The basic English text is *Vocational English I* by A. E. Jochen and Benjamine Shapiro (Globe Book Company). This text is slanted toward the pupil's preparation for a vocation and presents materials and exercises that will be helpful in the one he chooses. Students are also urged to complete high school before seeking permanent employment.

Directed reading focuses on the study and re-teaching of skills needed for reading and studying varied kinds of materials. *Effective Reading* and *Successful Reading* by Lawrence Fiegenbaum (Globe Book Company) are used for reinforcement texts for these skills. The texts are designed to help the students by providing selections which they are likely to meet on any given school day. The selections are in varied lengths and have questions that give opportunities for improving comprehension and vocabulary growth.

The D. C. Heath publication, *Teen Age Tales*, is used for directed reading also. The selections are long: ranging from 1,685 to 8,020 words. Comprehension questions are designed to promote discussion and allow students to project themselves into the stories.

In addition to the aforementioned texts, Science Research Associates Reading Laboratory II C is used for directed reading. The multilevel materials take care of all the students at one time and guide each to move upward in reading improvement.

The basic social studies text, *Homelands Beyond the Seas*, Iroquois Press, is designed for upper elementary level students. The reading level and content seem to meet the needs. In addition, individual copies of several social studies textbooks are available. Students subscribe to and enjoy *Read Magazine*, a bi-monthly publication of American Education Publications. *The Britannica Junior Encyclopedia* is used for research and *World Book* is available if needed. The *Thorndike-Barnhart Junior Dictionary* and individual copies of *Hammond's Student Atlas* facilitate and promote student interest. Social studies reading skills are recognized as part of the total program of reading improvement. The correlation of these skills promotes a more interlocked and less fragmented class situation.

The aim of the slow learner-low achiever program is evident—self-improvement through the personal experiences of reading. Students, staff, and the community see evidences of self-improvement brought about through these experiences.

Self-improvement through reading is not accidental but is the result of certain conditions deemed necessary for a successful reading program. These conditions are: (1) provision through block-type teaching for students to have the same teacher for two consecutive periods; (2) setting up realistic goals in terms of student needs (release from "grade level" expectations); (3) a school climate favorable to the project, including cooperative attitudes on the part of administrative personnel; (4) provision of special materials; (5) selection of a teacher trained and experienced on both the elementary and secondary levels. Greater gains seem assured as these conditions become more integrated into the fabric of the total school curriculum.

## D. COLLEGE

### 1. Differing Types of Reading Programs

GEORGE B. SCHICK

AT THIS particular stage in the history of the United States, reading as a fundamental accomplishment seems to be receiving more attention than it has ever before enjoyed. Prolonged scrutiny of the relief rolls, especially in large urban areas, of the chronically unemployed, of the young people who leave school at the earliest possible age or who are clearly potential drop-outs—everything seems to point to the critical need for basic reading skills, either to get or to hold some of the most ordinary of unskilled jobs. Indeed, it is now being adequately emphasized that the non-reader does not even have the opportunity to learn about jobs in newspaper advertisements, in bulletins or notices at employment agencies. For he cannot derive from the printed material what is wanted, what to do to get a job, or what is involved in filling out an application blank. Pathetic and outrageous as this situation may seem to be in this, the third quarter of the twentieth century, it is nonetheless demonstrably true, of tens of thousands of people whose forebears came to this country ten or fifty or one hundred and fifty years ago, whose academic record shows the requisite varying number of years spent in a school building but who in reality put in merely so many months and semesters of physical occupancy of classroom space, whose skin pigmentation may be shades of white or brown or black or some in-between color, and whose chances for improvement of their lot have been utterly negligible until the current programs were undertaken for the training of the employable through the development of basic skills as well as of vocational knowledge and practice.

In the widespread attack in the adult world on poverty and ignorance—which largely go hand in hand—reading is thus receiving some much-needed consideration. Moreover, it has also been brought to public attention that secondary schools have a role to play in combatting the functional illiteracy which is partly responsible for many adult deficiencies. Clearly, no full-scale effort to eliminate the so-called "pockets of poverty" and financial degradation can succeed in getting at the problem without thorough and extended attention to intensive reading training on the junior and senior high school levels.

In all these endeavors, it is abundantly apparent to administrators and teachers alike that no one formula, no one panacea, no single approach, is adequate to cope with the myriads of different circumstances, of degrees of capability, of varying conditions as seen in one or a thousand different cities and as observed in the tens of thousands of people who need help. Hence the wisest of those who have charge of these programs realize that the end in view may be simple—to bring about reading skill or the ability to write and figure. But the means to these ends will have to be varied and adapted to local conditions, to particular environments, and indeed, insofar as possible, individual learners.

#### College Programs

Fortunately for those of us charged with the responsibility of improving the reading of college students, the pathetic and remedial aspects of reading disabilities are for the most part less acute and somewhat less prevalent than those found in the non-academic adult world. In fact, the uninformed today—or those who refuse to face reality—agree tacitly with their predecessors of 35-50 years ago and regularly assume that all college students can read sufficiently well to perform any and every task to which they are set. Those students who cannot get along well are either failed or forced to repeat the work, without regard for the contributing cause of their failure.

Reading specialists today, however, and a great many of their alert and observant colleagues also are aware of the tremendous significance of courses in reading-improvement for the great majority of American students in public and private colleges, in universities and seminaries and junior colleges. Indeed, the more we analyze and study and test those in attendance at collegiate institutions, the more we become conscious of the necessity for additional training to develop students' proficiency in coping with the scores of reading situations that confront most undergraduates every semester.

### Ultimate Goal

The utlimate goal is plain enough, to develop "top-flight readers." Characteristics of this sort of mature and proficient readers are detailed as follows, in a very wise and suggestive article by Mrs. Helen Rand Miller:

> 1. His reading is an active brain in action. It is not mechanical, and no machines could have taught him his many kinds of reading.
> 2. He has many purposes in reading and uses a special method to accomplish each purpose. Long ago he acquired the habit of pulling out the skills as he needs them. When he begins a piece, he seems to be casting about to decide how to read it.
> 3. There is no tension or even apparent haste. He doesn't just sit; he settles down in such luxurious comfort with easy attention and thoroughly absorbed interest.[1]

Of course this is the ideal, scarcely to be realized for as many as ten to twelve out of a hundred, perhaps. But who can successfully argue that teachers are not idealists — could they become or remain teachers if they were not, undeniably so?

Granted then, that the aim of a college reading program is to lead students to become "top-flight readers," and failing that, to encourage and train reluctant or non-readers to acquire skills necessary to their success in college and afterwards. If the ends we seek are relatively simple and easy to accept, the means to those ends are, on the contrary, complex, numerous, and greatly diversified.[2] Through careful scrutiny of local circumstances and testing of student population, through adaptation of the printed matter and devices available as training-aids, and through repeated trial and error, directors and teachers at reading centers offer what is, in their judgment, the most useful and effective instruction to be attained. In so doing, the reading staff adapts and analyzes and modifies the means of instruction. The outcome, customarily, is an extraordinary, or perhaps unique program. Hence the training at Stonehenge College may well differ in several remarkable respects from that offered at Salem Square Junior College or Alexander P. Dunworthy University. So much the better, if the results are satisfactory, and if the common goal is attained of genuinely improved reading skills for all—or most all—of the students.

Lest boundless complacency and utter euphoria set in, however, let it be noted and noted well, that this sort of admirable diversity in presentation of reading instruction presupposes a well-trained, enlightened, and alert reading staff. As yet, unfortunately, the demand for such splendidly equipped instructors exceeds the supply by a ratio of approximately ten to one, at a conservative estimate. Francis Keppel, United States Commissioner of Education, discovered that among secondary school teachers some 90 per cent considered themselves incompetent to teach reading.[3] Were a similar survey made among college instructors, of such subjects as history, psychology, education, English, or biology, is it likely that they would in all honesty deem themselves more capable of teaching reading than their colleagues in secondary schools?

The task of every reading teacher in

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[1] Helen Rand Miller, "Top Flight and Pedestrian Readers," *Elementary English*, XXXIV (Feb., 1957), p. 73.

[2] George B. Schick, "Diversity in College Reading Programs," in *Perspectives in Reading, No. 1, College-Adult Reading Instruction*. Newark, Delaware: International Reading Association, 1964, pp. 14-26.

[3] Francis Keppel, "Who Is to Speak for English?" a paper delivered before the Modern Language Association, General English Session, Chicago, Illinois, December 29, 1963.

college is therefore very plain, within the limits of his physical and professional capacity, he must assist in the enormous project of training hundreds—later, thousands — of students to become reading teachers worthy of respect. In informal discussion, through in-service programs, in methods courses and workshops and seminars, reading specialists are obligated to impart the knowledge and skills demanded of a competent reading teacher. It is a task not to be shirked. And let no one so trained be permitted to go out and teach if he is guilty of that condition described by the old refrain, "I Don't Have Time to Read" myself.[4] For the reading instructor who cannot testify to the joys and privileges of regular reading is to that degree incompetent, perhaps even contemptible.

### Diversity in Methods and Materials

It should be stated once again that not the least among the ideas to be kept in mind by the reading specialist as well as the beginning teacher in college reading is that diversity in methods and materials and practices in the presentation of college training is inevitable; at best, it is most desirable.

## 2. A Study Skills Type of College Reading Program

WALTER PAUK

THE COLLEGE and university programs which emphasize the teaching of study skills as opposed to rapid reading skills have a better chance for growing in strength and popularity since such programs more nearly meet the academic needs of the students.

A statement which is generally accepted is: At the college level, students obtain almost all of their academic information via two media—the textbook (including library assignments) and the lecture. It is reasonable, therefore, to conclude that if a student could master the textbook and master the contents of the lectures his chances to survive academically would be greatly improved. (Whether or not he becomes an educated person is quite a separate question which I will not deal with in this paper.)

Since these two media—the textbook and the lecture—are so all-important, it would seem that any college reading-study skills program which does not make strenuous efforts to present specific systems which will aid a student to master these areas is, in fact, neglecting its stated or implied objective.

Let us talk about the textbook problem first. No doubt, of the textbook systems, the SQ3R method is the one most widely taught; but at Cornell we use the OK4R system. This system is similar to Robinson's SQ3R except for the addition of one "R." The new "R" stands for "Reflection." The concept of reflection takes the student far beyond the memorization process of "recall." Reflection means that after the facts, data, or ideas are pretty well in mind, the student should think about implications, speculate about other possibilities, recombine the ideas to see whether they point to new directions or lead to new insights. Reflection is the first step in the process of creative thinking; whereas recall is but the first step in the process of rote memorization.

Of course, one must always remember that there is nothing magical or automatic in any of the systems for reading the textbook. The systems, based upon sound principles of learning, merely provide students with step-by-step procedures for studying a textbook. The extent of understanding and mastery depends upon the diligence of the students.

Let us now turn to the classroom lecture. There are many misconceptions about taking of lecture notes. Some advocate recording only the key points; others suggest taking notes in outline form; others even advise using shorthand; while still others say, "Take notes in your own words!" or "Put your pencil down—just listen!" I consider all of the above urgings as bad advice, and if I had space, I could present my arguments to support my contention.

In notetaking, one must always keep in mind the one overriding principle: Forgetting takes place at a rapid rate, and if the student has not taken good and complete notes, he will not have worthwhile notes for restudying the lecture. Two, three or four weeks hence, his remembrance of the lecture will be most probably at the 10 to 20 per cent level. He then has need to recapture the 80 or 90 per cent which had fallen away. Without his own personal notes he is lost.

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[4] Jean Allen Battle. "I Don't Have Time to Read." *NEA Journal*, LIII (Feb., 1964). 13.

Just as we arm students with a system for reading the textbook, so we arm the students with a system for taking and studying lecture notes. Our notetaking system makes it easier for students to record the lecture, to review it immediately, to make jottings in the margin representing the key ideas, to employ the techniques of recall which can be done by covering the lecture notes but leaving exposed the jottings to act as clues for recitation, and finally to apply the process of reflection. Furthermore, after a thorough reworking (not rewriting which is a waste of time) of the notes in this way, the notes are set up ideally for future reviews for both quizzes and examinations.[1]

Let us now turn to the all-important third area—the area of reading imaginative prose, poetry, and drama. Let us make no mistake about its importance, because this is the area in which the untrained freshman most frequently meets his downfall.

Many of the incoming freshmen experience great difficulty in reading imaginative prose, poetry, and drama with discrimination and insight. Some students try to solve this reading problem by applying the SQ3R system, but this system does not work because it is designed specifically for the reading of textbooks—the reading of expository materials.

To solve this problem of close reading—that is, to teach students not just to read, or to read more quickly, but to read with precision and awareness, with the sensitivity that depends on the ability to sense and make discriminations—we devised a close reading system with the mnemonic title of the EVOKER. This method consists of the following six steps: Explore, Vocabulary, Oral Reading, Key Ideas, Evaluate, and Recapitulate.

If you are interested in a more complete description of the EVOKER system please refer to the November 1963 issue of *The Reading Teacher*.

Let us, for a moment, again focus on the question of a program emphasizing study skills versus a program emphasizing rapid reading, all of this in terms of a real, live student. When a student who is in academic difficulty comes to me, how foolish it would be for me to hand him a speed reading machine and say, "Here, take this back to your room and read your assignments with it." Or to say, "Let's go into the laboratory for a half-hour session on the tachistoscope." Or to say, "Let's do some more reading of the Harvard or Iowa speed films."

All of this sounds silly, yet, why do we use these powerless gadgets in our college reading programs? Remember! There is the whole wide field of study skills, and let me emphasize that study skills have a future—as I see it, the only future for programs at the college level.

So, when a failing student, discouraged, frustrated, and frightened, stands before you and looks for help, what do you do? I don't know! But, here is what I do: I say, "Come around the desk and pull up a chair." If the student's problem is a textbook one, then I show him how to find the main ideas and supporting material, underline, make jottings in the margin, recall, reflect. I show him how to master the assignment; but, I don't, *I* don't hand him a speed reading machine.

## 3. An All Freshman Developmental Reading Program

JAMES M. SAWYER

TODAY much of the concern as to whether a college or university should offer a developmental reading program has diminished as indicated by the large number of institutions which have added these programs to their curriculums during the past decade. No longer is the reading program a stepchild to be pushed into the background or scheduled at off hours that no other academic discipline wants. In many cases it has moved to the front as an intricate part of the student's program, available not only to the student who falls below a particular point but also to the superior student who desires to improve his over-all reading ability.

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[1] For a complete coverage of textbook reading and notetaking, see *How to Study in College*, by Walter P[illegible] (Houghton Mifflin, 1962).

Therefore, an institution that is planning a reading program must carefully consider the question, What goes into the planning and organization of a college reading program in order to fill definite needs within the total college program?

Even with the amount of research that is available and the large number of successful programs which are in operation, a school can become thoroughly confused by the lack of agreement in such areas as methods, philosophies, concepts, and desired outcomes. Since research has not provided all the answers, an institution, to be successful, must plan its program to fit its own needs and desired outcomes. If we observe only a few, it becomes quite evident that these programs are successful because of different reasons and factors.

In 1955, Appalachian College began making some minor provisions for those college students who were interested in improving their reading and in receiving help. It soon became evident that there was need for an organized college reading program to accommodate the large number of students requesting this service. Further need for this program was borne out by the following conditions:

1. Many entering students fell below that which is academically desired for those entering the teaching profession.
2. The high drop-out rate of students.
3. The percentage of students who were still reading below national norms as juniors.

By 1960, after much planning and study, a program was finalized for freshmen developmental reading which would be based on the philosophy that reading:

1. Is a major skill used in acquiring information.
2. Is a continuous developmental process which is never completed for most people at any time during their lives.
3. Has certain basic skills which need to be developed, reinforced and enlarged on the college level.

Further impetus was given to the program by the fact that education today demands teachers who are not only well prepared in their field of specialization but also requires that they be widely read, possess a functional set of reading skills, and have an analytical attitude toward their own reading. Thus, through strengthening the reading skills of our students, they will become stronger teachers.

In 1961 Appalachian College, a single purpose, state-supported institution with a student body of 3200, began its required all freshmen developmental reading program. This course emphasizes vocabulary development, fluency in comprehension, and study skills.

Comprehension receives the major emphasis and actually each activity within the program is just another means of enhancing this skill.

The level of vocabulary development is relatively easy to measure but difficult to improve within a short period of time. Our primary objective is to help the student to develop an analytical attitude toward his vocabulary and a systematic approach toward vocabulry growth.

Since performance in one area of reading does not guarantee success in another, study skills receive a major emphasis. It has been our experience at Appalachian that, in general, entering college students are not adequately prepared in this area. Another goal of the program is to aid the student in developing and utilizing the most effective study methods possible.

Most students feel their problem in reading is one of speed, looking upon this as a panacea. However, we are more concerned with quality—in terms of purpose, author's intent, level of difficulty, and background of experience, rather than quantity.

During the first three years of operation, the Developmental Reading Program served 2700 college freshmen; and of that number, approximately 85 per cent have reacted in an enthusiastic manner.

Today it is no longer a question of whether the program is needed or how long it will last, for it is now an accepted part of the instructional program at Appalachian.

## 4. Current Emphases in College Reading Programs

JAMES M. MCCALLISTER

DURING the past twenty-five years we have been experimenting with various types of reading programs at the college level. Most of these programs have not been evaluated objectively by acceptable research standards. Nevertheless, much has been learned from the experiences of those who have tried out various approaches. This paper will attempt to summarize five emphases which seem to be developing gradually.

### Reading as a Process of Intellectual Growth

Reading is a process of intellectual growth which continues throughout college and cannot be expected to be completed in a short period of instruction. Too often we have thought of instruction in reading as a course instead of a continuing process. The most that can be expected of a course in reading is to accelerate or redirect growth that has already been started by the school experience of the student. If a single course is expected to complete the job of reading instruction the results are likely to be disappointing. On the other hand, if we think of instruction in reading as a continuing process instead of a course, we immediately re-examine our goals and procedures and shift emphasis from such items as pre-designed reading programs, workbooks, progress exercises, mechanical devices, and other fixed types of instruction to the place of reading in the learning process.

### Types of Instruction to Be Emphasized

Perhaps no one has made a completely acceptable analysis of the mental processes involved in growth in reading at the college level. Much has been written about reading as an intellectual process and about forms of critical thinking which are aspects of reading. With these emphases the student may be expected to develop increased skill continuously in ascertaining meaning by searching for the purposes, moods, attitudes, and other clues which reveal the meaning intended by the author. The student may be expected also to develop increased skill in identifying and detecting the meanings of words by cultivating an awareness of how words shift in meaning from one context to another, by recognizing the emotional tone of words, by interpreting metaphorical language, and by recognizing how words operate to express meanings.

The student may also grow in his ability to apply objective bases of evaluation to what he reads. He may develop the practice of weighing and considering data, of detecting false inferences and unsubstantiated statements, of testing the authenticity of sources, of suspending judgments, and of formulating valid conclusions.

### Coordinating Reading and Content Courses

To emphasize reading as an intellectual process it is evident that instruction in reading and instruction in the content courses should reinforce each other. Such reinforcement is seldom accomplished, but it is undoubtedly a major function of the reading specialist to direct tactfully the attention of other college teachers to ways in which they may guide reading activities so that students may attack assignments more effectively. To make reading effective in all fields the reading teacher and the content teacher can share their several specialties and utilize them for the growth of students. If growth in reading is to continue beyond the usual reading course the content teacher must be sensitized to his opportunities for guiding it.

### Evaluation of Improvement in Reading

If we think of growth in reading as a continuing learning process, evaluation of improvement is not an end-product that can be finally determined at the close of a period of instruction. It is a continuing procedure to be estimated at intervals to ascertain not only the progress of students but also the direction that the program should pursue. Perhaps end-of-class tests will always be the first estimate of improvement. This estimate should be followed by periodic examinations of other evidences of growth. If the student continues to show improvement in academic pursuits, this improvement is probably one of the best evidences. A series of cumulative records is really needed to follow the reading growth of the student through college.

### Functions of the Reading Specialist

The reading specialist is the pivot about which reading instruction is organized and developed. He is responsible for initiating and supervising the reading program, for enlisting the cooperation of content teachers, and for enlarging an understanding of the place of reading as an aspect of learning. He must of necessity be an expert teacher of his own subject. Only by working with students as well as with co-workers can he become acquainted with the needs of students and with effective ways of meeting those needs. An increase of emphasis on reading as a growing intellectual process should make the reading specialist more influential in the overall growth of students.

# SEQUENCE III DEVELOPMENTAL READING WITH BASAL MATERIALS

## A. ELEMENTARY SCHOOL

### 1. Building a Developmental Reading Program

FLORENCE SPERLING

PERHAPS in no other area of the curriculum has more been accomplished in evaluation and research than in the area of reading instruction. With concern for the kind of reader who will be a mature reader in the 1980's, today's teachers are forced to consider all facets of learning, taking the best from the old and incorporating much of the new. How this is done will depend upon the philosophy of the school system where the teacher works.

As the result of a recent study, "The First R," sponsored by Harvard University and the Carnegie Corporation under the direction of Mary C. Austin, recommendations were made to imbue teachers with a philosophy of teaching reading appropriate for today and tomorrow. The forty-five recommendations made in this study are, in part, concerns of all developmental programs. They give the what, when, and how for program planners—*what* constitutes a good program, *when* pupils are ready to profit from direct instruction for the maintenance and refinement of skills and literary appreciation, and the *how* of teacher performance.

Developmental reading, developed over the past decade, tends to incorporate sound principles from both the traditionalist and progressive point of view. Learning-to-read is begun in kindergarten or first grade and continued as a developmental process through skill building. Also, reading-to-learn soon is found a necessary process which continues to spiral as the learner progresses. How we go about accomplishing our goals for all readers necessitates educating with concern for individual differences, and using materials which can be adjusted to varying needs of the learner.

The organizational plan just outlined places emphasis upon reading as the first *R* in the language arts program, and provides better opportunity for a teaching-learning situation within each group of individuals. Teachers, regardless of the group of youngsters—whether the group be mentally retarded, maladjusted, gifted, average or remedial—must plan for differentiation of instruction within each group. The developmental program attempts to develop growth in skills so that words produce meaning, specific reading skills develop better comprehension and the reader learns to think as a result of his skills training.

In order for teaching-learning to result in this kind of program, materials are essential for the teacher. This plan requires basal readers, supplemental readers, literature series, and classroom libraries to provide challenging materials for all levels of performance. Boys and girls must have opportunities to use encyclopedias, dictionaries, globes, charts, and many other reference materials. The many fine trade books for different reading levels and interests must be included. No single basic material can be used to do the total teaching job.

The developmental approach to reading considers the individual, his perceptual skills, his intellectual ability, experiential background, and stages of physical, emotional, and social background. This means that within each classroom there are wide ranges of differences among the individuals, hence, organization is necessary to provide equal educational opportunities so that each may learn and progress at his own rate.

Organizing classes into sub-groups so

that individual differences will be met, necessitates careful consideration of the ability and performance of each child. Some children are identified as having intellectual abilities low enough to require placement in special education classes. Others are diagnosed as emotionally disturbed or socially maladjusted and they benefit by a special class where there are not more than six youngsters, with a teacher who is understanding of their needs. There will be very able readers who should have an opportunity to meet for reading as a group with a special teacher to develop basic skills and literature appreciation. The wide range of average readers within the two extremes may work in groups with the regular classroom teacher. Children with reading difficulties far below the average reader's should work as a group with the developmental reading teacher who instructs at the performance level of each individual.

The special service personnel needed to support the developmental program in each elementary school are the administrative and instructional leader, the principal, and the developmental reading teacher to assist him and to instruct. Also, available to each school is the visiting teacher who is a reading specialist, the school psychologist, the school nurse, and members of the central staff. These persons all work toward improving reading services within the elementary school.

Developmental reading programs as just outlined, are in operation with success in many areas. Teachers and administrators are striving to meet the goals set, but still there is much to be done. The reader we produce for the Eighties requires a constant challenge and honest evaluation.

## 2. The Basal Reader, a Tool for Meeting Individual Differences

TRULA MAUD JETTON

ACCORDING to the dictionary, a tool is any instrument used in doing some work, or it may be a person or thing used as a means to get something done. Just as speech is a tool for the art of spoken communication, reading is a tool for the process of getting thought from the printed page. This tool, used effectively, opens the door of the mind to science, social studies, and our heritage of literature and history. Books are tools of education; now let us consider the basal reader as a tool for meeting individual differences.

If individual differences are to be met effectively, the first consideration should be a brief review of some of the ways children differ. To say that children differ physically, mentally, emotionally and socially may not emphasize the uniqueness of their variations. For example, social differences have a tremendous impact upon a classroom situation. The spoken language of each child reflects something of his cultural as well as his environmental background. Because of experience, the same words may have various meanings to different children. For this reason communication is often hindered.

The teacher is recognized as the key to a successful instructional program, and her effectiveness depends upon her skillful use of tools such as the basal reader. It is her responsibility to know her children and how they learn; to understand the material with which she is working; and to adapt the material to the different needs of the children. The teacher's role becomes one of diagnosis. William Sheldon suggests that the teacher of small children can use the following method:

1. Assess a listening capacity by determining how long and at what level a child can listen.
2. Measure the idea level of children through pictures of their own evironment.
3. Use readiness books for diagnosing children's ability to discriminate auditorily and visually.[1]

The teacher can also use informal reading inventories to help determine levels of reading and rate of comprehension. Manuals and workbooks offer review tests of skills and can be used in diagnosing pupils' needs and achievements. The tests which accompany basal readers provide help in determining the kinds of competences. "The effectiveness of the teacher's work depends a great deal upon good diagnosis of needs and accurate assessment of achievements."[2]

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[1] William Sheldon, "The Teacher's Role in the Diagnosis of Reading Problems," An address given at a reading conference in Alpine, Texas, July, 1963.

The teacher's next problem is one of adapting the material to individual differences. Emmett Betts says that to be successful in this respect the teacher must (1) understand the causes and symptoms of at least the common difficulties in reading, (2) have the necessary perceptions and skills to use systematic observations as a basis for estimating the instructional reading levels of their pupils, and (3) obtain some information on the readability level of the instructional materials. Successful teachers understand that lip movement, finger-pointing, word-by-word oral reading are some of the symptoms of reading difficulty.

With this much insight into the reading difficulties of the children, the teacher's success is not insured, for she must be able to make reading interesting for the children. Some ways to accomplish this goal are (1) beginning where the learner is and (2) guiding him to higher levels of maturity in his interests. She must be able to develop phonics and word-perception skills to the point at which they are used automatically and she must remember that the process called thinking and the product called comprehension are the focal point in reading and in reading instruction.[3]

The skills program in a good basal reading series is methodical, organized, and thorough. It has an order in the sequence of language development: listening, speaking, reading, and writing; and it takes into consideration the systematic development of interests, phonics, and other perceptual skills of thinking abilities. To base instruction on needs requires thorough, orderly development of skills.

Basic reading instruction is differentiated in terms of pupil needs. This attention to specific needs gives thoroughness, regularity of help, and orderliness to instruction—providing some insurance for individual maturity in interest and skills.

Therefore, the teacher must know each individual child, his personality traits, his needs, his cultural background, his instructional and independent levels of reading, as well as the level of his reading skills development. She must have an organized sequence of skills to present. Then she can plan her instruction, beginning where each pupil is, and help him to mature in his interests, in his automatic use of phonics and his perceptual skills, and in his abilities to think in a reading situation.

The basal reader, used in the hands of a skillful teacher, serves as a well-defined ladder of skills which makes it possible to fit the instruction to the specific needs of the child. Let's think of basal reading as a tool for developing and refining reading skills so that each child can read for pleasure and information.

## 3. Using Basal Materials Effectively

I. E. AARON

THE CONTRIBUTION of basal readers to the teaching of the fundamental reading skills depends upon how effectively the teacher uses these materials. Much of the argument against basal readers can be traced to their poor use. Books in and of themselves will never teach a child to read effectively. Teachers utilizing a basal reader approach in reading instruction are obligated to capitalize to the fullest extent upon these instructional aids.

The teacher in the elementary grades who knows well the many comprehension and word attack skills and who has a good idea of an effective sequence for teaching these skills can operate successfully without basal readers. Most elementary teachers, however, need some sort of a guide for making certain that all of the important skills of reading are taught. These basal readers, with their accompanying teacher's guidebooks, offer such a sequence.

Though basal readers may be used effectively to aid in teaching the basal skills of reading, a complete dependence upon them is harmful. They must be supplemented by library books, teacher-made exercises, and other reading materials. Wisely used, however, these basal materials have much to offer the teacher as a framework for skill instruction.

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[2] Constance M. McCullough, "Through Methods and Materials," *New Frontiers in Reading*, Vol. 5 (1960), p. 35.

[3] Emmett Albert Betts, "Reading in Relation to the Total Curriculum," *New Frontiers in Reading*, Vol. 5 (1960), p. 145.

Teacher experience and a limited amount of research offer some guides for effective use of basal readers and related material. Teachers should:

1. Take adequate time to teach thoroughly the comprehension and word attack skills.
2. Teach children in basal readers that are suited to their reading levels.
3. Teach superior readers in books of the adopted basal series that are on their reading levels even if these children are reading on levels above the grades in which they are enrolled in school.
4. Read in advance all selections in each basal reader used in the basal reading program.
5. Keep the basal reader at school and place it in the children's hands only when it is needed for instructional purposes.
6. Use the same publisher's series of basal readers throughout the primary grades in a given school instead of series A at one grade level and series B at another grade level.
7. Study the guidebook lesson plan thoroughly before attempting to teach the directed reading lesson.
8. Deviate from the guidebook lesson plan when deviation is needed to improve instruction.
9. Know the basal reading skills and how to teach them efficiently and effectively so that instruction may be modified to overcome lesson plan weaknesses in suggested skill practices.
10. Adapt the time spent in building readiness for a given selection to the children's backgrounds and the particular selection being used.
11. Introduce in the readiness phase of the lesson only those new words that the children cannot recognize for themselves.
12. Have the children read silently before they read orally.
13. Ask different types of questions in checking on comprehension in order to develop a variety of comprehension skills.
14. Schedule most word attack skill practice after a silent reading of the selection.
15. Vary the purposes for re-reading a selection in order to develop a variety of comprehension skills.
16. Use follow-up activities only if they have educational value and contribute to the development of reading skills, understandings, or appreciation.
17. Supplement basal reading materials generously with recreational and informational reading materials.
18. Use a particular workbook exercise only if it contributes to the development of some skill needed by the pupil with whom the exercise is being used.
19. Correct workbook exercises as soon as possible and discuss results with the children.
20. Avoid using workbooks as devices for keeping the faster-moving children occupied.
21. Teach the basal reading skills thoroughly within the framework of the adopted basal reader series so that systematic coverage of a second publisher's series on the same difficulty levels as the first series will not be necessary.

## 4. Comprehending Comprehension

James F. Kerfoot

Instructional programs in reading at all levels have been greatly concerned with the development of the ability or abilities that have come to be known as reading comprehension. Comprehension is likely the most complex area of reading instruction and is surely the most confused one. This paper addresses itself to the problem of confusion in comprehension and discusses the following four topics:

1. What are the areas of confusion?
2. What are the critical problems in reading comprehension?
3. What are the sources of confusion?
4. What recommendations are indicated?

### Areas of Confusion

*Difficulties in Reading Textbooks*

One major area of difficulty encountered by the student of reading comprehension involves the reasonable but highly individual use of terminology by the authors of reading textbooks.

*Classification by Units.* Reading comprehension has been frequently classified by units of material. Uniqueness is attributed to the reading behaviors involved in comprehension of words, phrases, sentences, paragraphs, and total selections. These behaviors are thought by some to represent "general reading comprehension ability." Terminology is fairly consistent within this classification scheme.

*Classification by Rate.* A second type of classification involves rate or the care which is devoted to a comprehension task. The following examples illustrate this type of comprehension and some of the vocabulary difficulties.

Yoakam (5) lists: Careful reading, normal reading, rapid reading, and skimming.

Berg, Taylor, and Frackenpohl (1) list: Careful reading, usual reading, accelerated reading, and selective reading. They break down selective reading to include skimming and scanning. Skimming for Yoakam includes scanning.

Spache and Berg (3) consider skimming and scanning as types of rapid reading, while Berg, Taylor, and Frackenpohl are careful to distinguish skimming and scanning from accelerated reading which is the equivalent of Yoakam's rapid reading. Rate classifications by other theorists add to the confusions which are evident here.

*Classification by Purpose.* A third classification still more confusing is concerned with reading for various purposes and involves what Bond calls "the specific comprehension abilities." Since reading purposes may be so varied, this type of classification is often elaborate and the commonalities among classifications are often obscured.

### *Difficulties in Reading Tests*

A second major area of difficulty involves the differences in tests of reading comprehension which purport to measure a particular ability. Perhaps the greatest point of weakness is the test which measures "general comprehension ability." Tests of specific comprehension abilities are even more difficult to compare in terms of stated objectives and the responses involved.

### *Difficulties in Reading Programs*

A third major area of difficulty involves the materials of instruction. As long as teachers follow step-by-step the program outlined in the teacher's manual, they are not troubled by the kinds of problems we have been discussing. But teaching involves much more than following a long range plan. Effective instruction demands goal clarity. In the present state of comprehension, ambiguity predominates.

## Critical Problems in Reading Comprehension

### *Problems in Research Interpretation*

The first critical area in which ambiguity has been disabling is the interpretation of research. Suppose, for example, that two investigators comparing the same two methods get conflicting results in vocabulary and reading comprehension. Can these results be directly compared? Many factors might account for the observed differences, but let us consider the effect of terminology alone. How is vocabulary measured? Kelley (2) in 1932 located 26 separate item forms for vocabulary tests used at that time. Shall we assume that they are all comparable and that anything called vocabulary may be compared directly with anything else called vocabulary? As previously mentioned, the same problem exists with comprehension but is much more complex.

### *Problems in the Testing-Teaching Situation*

The second critical area is the testing-teaching situation. Here teachers are faced with all the problems involving measurement of comprehension, and the materials of comprehension, and in addition the problem of matching the instructional materials to the measuring instruments.

### *Confusion through Relationship to Intelligence*

Reading is frequently referred to as a thinking process. We tend to accept the increasing correlations between IQ and reading achievement as we advance through the grades as evidence of the increasing involvement of the higher thought processes as the program grows in comprehension emphasis. It is not strange that theories of reading comprehension should closely parallel theories of intelligence, and the issues in defining intelligence are far from resolved. The same difficulties which plague us in dealing with intelligence are present in our deliberations about reading comprehension. Spearman (4) was mistaken when he wrote in 1927 "Chaos can go no further." He then added, "Intelligence has become a mere vocal sound, a word with so many meanings that it finally has none." This statement could not be more appropriate if it had been intentionally directed toward reading comprehension.

### *Problems in the Testing-Teaching Situation*

A second source of confusion in reading comprehension is that of labeling as a personal convenience. The choice of terms is not being criticized here, since the terms selected by authors of comprehension discussions are usually reasonable ones. What is being questioned is the practice of personal labeling which forces the consumer to reconcile differences in perspective.

### Recommendations

*First,* it is suggested that teachers and research consumers become independent of labels. The materials of measurement and development in reading comprehension should be related in terms of the tasks represented, without regard to nomenclature.

*Second,* it is suggested that comprehension be approached through operational definitions. To be thoroughly operational in description would be a significant advance over our present practice of personal reporting.

*Third,* it is suggested that an attempt be made to classify operationally reading comprehension. Labels could then be assigned to any combination of operations for descriptive convenience, but we would know with some exactness what was being described.

*Fourth,* it is suggested that the accumulated data of reading comprehension be operationally reevaluated. Efforts directed toward clarifying present research might resolve a number of inconsistencies, be productive of new insights, and suggest future directions for study.

Reading comprehension is complex and difficulties will not easily be resolved, but a classroom independence of labels, an operational approach to current research problems, and cooperative effort toward redefinition and reevaluation may help us to reduce ambiguity and to restore communication.

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## B. JUNIOR HIGH SCHOOL

### 1. Reading Essentials in the Junior High School Program

EDITH C. JANES

READING is a series of complex activities which varies with the kind of material read, the purposes for reading, and the ends or values sought. Few pupils completing sixth grade read well enough to master high school and college subjects. They are not mature enough to understand complex reading skills and difficult words, many of which they do not need until they reach secondary school.

The elementary school lays the foundation for reading, but the complex skills needed to achieve maturity in reading must be taught in the junior and senior high school. Planned instruction and practice in increasingly difficult interpretations is a definite part of the upper grade curriculum in order to maintain skills learned previously, and to develop techniques for applying them to more complex material.

### Reading Essentials

The reading essentials in a junior high school program are: (1) instruction that is planned to enable each child to move forward progressively and in harmony with child growth and interest; (2) a curriculum planned to enable each student to make maximum progress in accordance with his experiential background, his maturity level, his reading ability, and his mental ability; (3) adequate materials to provide instruction and independent reading at the wide range of reading levels found in each class.

### Instruction

The first essential is instruction. The teacher must plan a day-by-day program that puts into action the basic principles of good instruction in working with pupils, in selecting materials, and in presenting lessons.

Teachers should help pupils do such things as:

1. Understand their weaknesses and ways of overcoming them
2. Establish realistic goals for themselves
3. Establish good study habits
4. Gain motivation and encouragement by evidences of progress, such as scores recorded on charts and graphs and improved scholastic achievement

Teachers should plan instruction and practice with the following in mind:

1. To provide maximum improvement, materials for instruction should be at instructional level or slightly lower.
2. To estimate the instructional level, use an Informal Reading Inventory, or use a standardized reading test.
3. To select books for recreation and enjoyment, encourage pupils to choose books at least one grade level below their instructional level, so that they do not encounter difficult words and new concepts.
4. To develop vocabulary and gain information, encourage able readers to "stretch" into harder books occasionally.

Teachers will find that it is important:

1. *To plan guided reading lessons.*
2. *To plan lessons to improve specific weaknesses.*
3. *To use the Teacher's Guide or Manual accompanying the text* to save time in lesson planning.
4. *To allow pupils to discuss related experiences,* difficult words and new concepts in order to develop interest and provide background.
5. To instruct pupils in methods of reading specific types of material in order to help pupils understand the direct relationship between developmental work in the reading class and their reading in all subject areas in school and in their leisure reading.
6. To give pupils an opportunity to read a selection silently before expecting them to read orally.
7. To present lessons in varied and interesting ways to stimulate interest.
8. To help students realize that some subjects may not be intensely interesting but must be mastered for future use.

### The Reading Program

The second essential is a curriculum planned to provide instruction to improve (1) vocabulary skills, (2) comprehension skills, (3) study skills, (4) flexibility or rate, and (5) oral expression.

### Vocabulary

Vocabulary includes both the skills of word identification and word meaning. In application, these skills complement each other. The junior high vocabulary program should provide for review, instruction, and practice to insure that every pupil can attack words with ease and can use methods that facilitate the learning of word meanings.

Pupils need to know how and when to use context clues, structural analysis, phonetic analysis, syllabication, and the dictionary to become independent readers.

### Comprehension

Students must learn to read, to interpret, and to react to increasingly difficult material. They must be able to read for such purposes as to find main ideas and supporting details; to follow the sequence in development of plots, characters, or arguments; and to follow directions.

Students must be able to distinguish between fact and opinion, detect bias and prejudice, make inferences, and identify the author's purpose—important requisites of an informed citizen.

### Study Skills

Students should be able to locate information in their own texts, in dictionaries, and in reference materials. They should be able to arrange events in sequence, to make outlines, to summarize, and to take notes. Instruction and practice in taking various types of tests develops self-confidence and improves scholastic grades.

Effective reading in the content areas must be taught The teacher of each subject should be responsible for teaching new concepts, vocabulary, comprehension skills, and study skills required to master his specific subject.

### Flexibility or Rate

The expanding curriculum in the junior high school makes it essential for students to show continuous growth in understanding when and how to use the techniques of skimming, rapid reading, and study reading.

Special projects to help pupils develop flexible reading rates provide practice in reading for specific purposes and motivation for wide reading. This wide reading provides the practice of reading skills so necessary to efficient reading.

### Oral Expression

Students in the junior high school need instruction and practice to improve in ability to utilize voice, expression, and attitude to do purposeful oral reading.

### Materials

The third essential of a junior high school program is sufficient materials at appropriate levels. School wide planning should provide instruction and related activities in:

1. Basic materials which provide a sequential development of reading skills and practice in using them. These may be reading texts, workbooks, multilevel materials, or may include all three.
2. Content area texts.
3. Supplementary readers and texts which are easier than those used for instruction and which can be used independently.
4. Current materials such as student and adult newspapers and magazines.
5. Reference books such as a dictionary, an encyclopedia, and an atlas.
6. Library books in a wide variety of topics and at various reading levels to provide recreational and informational reading.

### Summary

To be successful, a reading program must go beyond the development of reading skills. The student learns to appreciate books. He develops an intellectual curiosity and a realization that books can help him satisfy this curiosity. He reads to answer questions that he is reluctant to ask adults. He develops the habit of reading widely for pleasure and information. The amount, the variety, and the quality of what is read is the truest evaluation of the effectiveness of the reading program.

## 2. Effective Utilization of Basal Materials at the Junior High School Level

THOMAS E. CULLITON, JR.

IN AN AVERAGE eighth grade English class, we are likely to find a range of eight or more grades in reading ability. Lazar[1] reported that among more than 50,000 eighth grade pupils, only fourteen per cent were reading at the eighth grade level. Eight per cent had less than a fifth grade reading ability and almost seven per cent had a twelfth grade reading ability. The rest of the pupils were distributed between the two extremes. A poor reader in a junior high school is jeopardized in all areas of his curriculum where reading ability is essential to success.

The reading program in the junior high school should serve the needs of its various students. The program should help the remedial reader improve in the essential skills as well as help the more able reader master and develop the skills at a higher level. To meet the needs of the junior high school pupils, to give the pupils satisfactory experiences with which they can develop, maintain, and improve their reading skills, we must provide a wide variety of interesting reading materials at all levels of readability.

An examination of the basal reading series that continue their programs into the junior high school indicates that less emphasis is placed on the teacher's manuals at the seventh and eighth grade levels. The seventh and eighth grade materials include a wide range of literary items, biographical materials, folktales, science, and poetry. The basal readers actually evolve into a collection of articles and stories chosen to parallel the pupil's educational attainment as well as to stimulate new interests and to challenge him. This is considered worthwhile; unfortunately, however, the material available often determines the amount and degree of reading instruction which is offered.

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[1] May Lazar, (ed.). *The Retarded Reader in the Junior High School.* New York: Board of Education, City of New York, Bureau of Educational Research, 1952.

If we accept the findings of Lazar[2] then it becomes obvious that before any instruction is begun, a well-organized and well-planned testing program must be implemented. Before instruction is begun, the teacher must first identify the essential reading skills which he would like all pupils to possess. While setting up the criteria for identifying the skills, the teacher should keep in mind that he expects the junior high pupil to be able to read, understand, judge, and make use of the material read.

If we approach the idea of teaching reading with the concept that we should test before we teach, we will have some idea of the needs of the pupils. The purpose of this testing is to identify the students in need of special instruction or educational assistance and, more specifically, to determine the areas in which the pupils are weak. The teacher should identify the kinds of mistakes the child makes as well as ascertain why the errors were made. We must be concerned with scoring the test as well as interpreting the results of the test.

Sound pupil evaluation, planning, and teaching can be accomplished through an approach that takes many factors into account. A test score reflects only one feature or one aspect of the problem. This must be viewed and interpreted in relation to the total picture in order to be effective. Other aspects would include such things as teacher observation, checklists, interest inventories, cumulative records, health records, etc.

Once we have obtained information on the reading characteristics of the pupils, we have the very important tasks of analyzing or interpreting the material and then evaluating the information. After these tasks have been accomplished, the all important task of implementation of the reading program that will provide for the individual needs of the pupils still faces the teacher.

After we have determined the class needs and have identified the students' abilities and disabilities, the task of the teacher is quite clear. He must understand why he is teaching, and the relationship of what he is teaching to the total reading program. The teacher must utilize all of the tools of modern knowledge in teaching the pupil to read.

When one thinks of the development of the skills basic to the reading task, he quite naturally thinks of the basal reader. Basal reading is defined in the *Dictionary of Education*[3] as "reading aimed at the systematic development of reading ability by means of a series of books or other materials especially suitable for each successive stage of reading development." It seems quite natural, then, to view basal materials as a series of textbooks; however, any reading material used to help a child achieve the desired skills is basal reading material. This might include textbooks, tradebooks, newspapers, and any other devices dealing with the development and implementation of the reading skills and processes.

Effective utilization of basal materials is, in the final analysis, an intelligent approach to the total reading problem as revealed through the techniques of both formal and informal diagnosis. The extent to which a reading program is successful is largely dependent upon the extent to which a thorough and continuous diagnosis is a part of that program.

## 3. Helping Junior High School Students Get to the Heart of Their Reading Matter

SISTER MARY JAMES, S.C.L.

CHALLENGED by difficult textbooks and by a multiplicity of reference materials, the junior high school student must be able to get to the heart of his reading materials as rapidly as possible if he is to be successful in his school work. Provided that he is already in possession of the fundamental skills of reading, he can be further aided by factors which facilitate work in any field of endeavor. Such facilitating factors include: (1) a familiarity with the area under study; (2) a clear concept of the total task to be done; (3)

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[2] *Ibid*

[3] Carter V. Good (ed.), *Dictionary of Education*. New York: McGraw-Hill Book Co., 1959.

knowledge of the materials to be used; and (4) skill in the use of techniques to be employed.

For the student, familiarity with the area under study means background knowledge—having at his command the skills and information which bring him up to date with his current lesson, whether that be mathematics, science, English composition, literature, or a foreign language.

A clear concept of the total job to be done in any current year requires that the student know at the beginning of the year, as specifically as possible, how the goals of the current year's school work are to differ from those of former years.

Knowledge of materials for the junior high school student means knowledge of reading materials—words: their meanings, structure, and functions. Meaning, to some extent, is taken care of through the vocabulary study which should precede the study of a chapter, unit, or any new phase of work. In the English class, however, more has to be done. Besides mastering the vocabulary related to the literary selections studied during the year, the students should be continuously developing a deeper understanding of their native language through the study of denotation of words as obtained by a knowledge of prefixes, suffixes, and root words; through a study of connotation by the use of speeches, advertisements or any means which illustrate the power of connotation. Included in word study should come an examination and knowledge of the functions of words as expressions of units of thought in sentences and paragraphs. What constitutes the skeleton of a sentence; how an author leads his reader from idea to idea; and the subordination of one idea to another—all are matters too important to be left to intuition since they are the very means by which a student gains the knowledge aimed at in the goals of his school work.

Techniques to be employed are determined by the nature of the subject being studied; and since they differ from subject to subject, they become the responsibility of the individual subject matter teacher. For instance, some common study techniques in the content areas concern the study of a chapter and the forming of summaries or abstracts of chapters. A very common study technique, used to aid students is the SQ3R Method of Study. The formula stands for the words, Survey, Question, Read Recite, Review. In the first step, the students are directed to form the survey by noting the title of the chapter, and the divisions of the chapter into topics and subtopics; secondly, they are told to turn each topic or subtopics into a question; thirdly, to read to find the answers to the questions which they have formulated; next to try to recite the answers to themselves; and finally, if they find they cannot recite, to review in order to be ready to recite in class.

Another suggestion for those who wish to read to remember or to recite in class is the habit of forming abstracts of one's reading. A student is told to form a skeleton of each important sentence in each paragraph by choosing the important words—the subject, verb, and object—and forming a sentence of them. When this has been done for each important sentence, the student is directed to telescope those sentences into one, thus forming an abstract of the entire paragraph, then of the entire chapter, article or book.

## 4. Practical Individualization With Basal Materials

MARY RUTH LAUCK

THIS presentation will be composed of some classroom tested methods, procedures, and activities that promote and encourage practical individualization within the framework of basal reading materials.

Differentiating reading instruction in the elementary classroom is not new, but moving forward with the same educational philosophy and activating it in the secondary reading program is new to many schools.

The individualization which I shall share with you has been developed in the secondary reading program of the city schools of Reading, Pennsylvania.

### Teacher Organization

The reading consultant is responsible for supplying the necessary instructional information which the seventh grade reading teacher will need. This information is gathered from the records of the child's past six years in elementary grades. These statistics must be arranged so that they are functional, simple, and understandable.

The data should include the latest information obtained from any standardized test of reading achievement and diagnostic information as well as terse comments about the child's reading performance in the elementary grades. What are his motivating interests? Does he have any physical or emotional handicaps that will need personal and instructional concern? What basal instructional materials have been used and with what degree of success? A form should be used which is of standard file size and should be kept in the reading classroom.

### Study-Type Reading With Basic Textbooks from Major Content Areas

Begin instruction with a brief presentation to all students on exactly how to analyze the textbook and put to work all its built-in study helps. Teach a basic study procedure or formula and demonstrate its adaptability to any content area.

After the group presentation it is time to individualize. Have short interviews with the students to hear their side of study difficulty. At this time use a simple study checklist. Confer with individual subject area teachers to discover individual course requirements. This will help.

An analysis of performance in each subject area should follow immediately after each report period so that the child's effort and the teaching is constantly in tune with his academic needs.

### Development of Versatility of Reading Rate

Basic principles of rate development should be taught to all readers: seeing words as thought units, setting objectives and purposes for which the knowledge gained will be used, discovering the author's plan of structure, and learning to shift gears to match the difficulty of the reading assignment.

### Book Reporting and Reviewing

We have no better opportunity to practice and promote individuality than when conducting book reporting or book reaction classes. Impress upon students at the beginning of the instructional program how book reports should be made. Demand versatility and variability in making reports.

Teach and talk about books and reading in such a way as to encourage and produce creative and logical thinking. What emotional response did you experience? What better understanding of world and mankind is yours as a result of reading this book?

### Oral Reading and Today's Readers

The great question still prevails: How much time and training should be devoted to oral reading? Belief in individualization makes the answer quick and easy. Oral reading enters a reading program as much as and to the degree that it will be beneficial to the child as he matures and finds his place in the living world. Any oral presentation is possible with a child, with any type of reading material, just as long as time has been given for adequate preparation.

### Spelling and Word Study

Each child is taught from the beginning of the reading program that spelling, word study, and vocabulary growth are all important in developing reading competence and efficiency.

Students work in multi-level, individualized spelling laboratories as well as incidental spelling activities springing from other basic reading materials. They enjoy the word study provided in the educational edition of *The Reader's Digest.*

All spelling and word study is kept functional and provided in direct relationship to the reader's need.

### Audio-Visual Aids

Learning is exciting, new, and different when the use of audio-visual aids is planned to individual needs, interests, and talents. This is the third dimension of individualization.

In the Reading School District, we are fortunate to be able to obtain many of our learning aids from the Reading Museum and Art Gallery which is operated by the local school district. Each teacher has a catalogue with a listing of films, filmstrips, recordings, displays, and various objects of art which he may order. Delivery comes to his classroom twice a week.

This type of approach is motivational to reading. It belongs in every reading program. It produces a new learner; it develops a reader alive with interest in himself, in others, and the very world in which he lives.

## C. SENIOR HIGH SCHOOL

### 1. The Rationale for Reading Textbooks

DAVID KOPEL

BASAL READING materials for use in the upper elementary grades and high school were first produced in considerable numbers in the middle thirties. These materials took two principal forms: a) workbooks, usually in paperback covers, with exercises for increasing reading rate, vocabulary, and various comprehension skills; and b) readers, more comprehensive and varied in content, containing skill-practice material as in the workbooks together with selections explaining many aspects of the reading process. Both types may, for convenience, be called reading textbooks; some were produced in single volumes whereas others were published in series of two to four books for as many grades.

As remedial and developmental programs increased in number during the forties and fifties they generated a demand for more materials. Not only new titles but also a few new types appeared. Thus some basal reader series were extended to include separate volumes for grades VII and VIII; these of course should be designated as reading textbooks. Also, other readers for the junior high school unrelated to any basal series, and resembling literary anthologies, but giving attention to reading skills, were introduced. Finally several publishers marketed boxes of practice reading selections and exercises, each mounted on heavy paper or cardboard, with the collections suitable for a wide range of interests and abilities. The recent materials are somewhat more sophisticated but essentially similar to those of the prewar period.

An evaluation of reading textbooks revealed that they mirror quite closely the commonly expressed objectives of developmental reading programs—to promote pupil improvement or growth in: (1) comprehension, (2) critical reading ability, (3) work-study and library skills, (4) vocabulary, (5) speed, (6) flexibility and appropriateness in use of reading skills, (7) reading interests and tastes, (8) oral and written expression, and (9) self-understanding and maturity of behavior.

The foregoing objectives represent values and constitute an underlying rationale of reading textbooks and other basal materials as well as of the developmental programs for which they were constructed. The nine items are not, of course, distinct and separate entities; they merely express different, and to some extent, interrelated or even overlapping facets of a dynamic matrix of good reading habits, skills, attitudes, and interests that comprise genuine competence in reading.

### 2. Developing Flexibility in Reading

BEATRICE JACKSON LEVIN

DESPITE the spurt in interest in speed of reading and the publicity given it by its more flamboyant proponents, most educators today agree that speed is not a unitary process nor should it be a constant, and that rate must always be congruent with the comprehension demands of the particular reading situation. In short, it is flexibility of reading rate that is necessary to efficacy in reading. Furthermore, according to research and observation of such people as Perry, Simpson, Thomas, Letson, and others, flexibility doesn't inevitably accompany the development of other good reading skills, but needs separate implementation. In the light of this, the following program of defining and developing flexibility of reading rate according to the reader's purpose and according to the level of difficulty of the material was undertaken.

The school in which I teach is an academic, all-girl high school, where the students are highly competitive and eager to improve in all areas. Efficiency in reading, therefore, represents a goal of primary importance.

In planning flexibility training, one must ascertain that the prospective students have no mechanical or semantic difficulties, for if there are problems in such basic skills as word analysis, vocabulary, or comprehension, then rate training would appear to be contraindicated at that time. However, it is important to keep in mind that the semantic problems of some students may stem from overly-slow, word-by-word reading. In getting an overall picture, it is also necessary to see at what level the student is operating independently and instructionally, for rate training should begin at a level where the student will encounter few mechanical or comprehension difficulties, so that he can concentrate on acceleration without fear of loss in comprehension. Therefore, preliminary testing is necessary.

Intelligence tests are given to check the general capacity. A standardized reading test (Cooperative Test-Reading Comprehension-2A) is administered, yielding a percentile ranking in vocabulary, level of comprehension, and speed of comprehension. An informal reading inventory and an informal check of flexibility are also administered. There is a careful evaluation of all the data. Those who evince problems in word attack skills or in comprehension are weeded out for instruction suited to their needs; the others who manifest few mechanical or comprehension difficulties are roughly grouped according to reading levels, for the flexibility training.

The results of all the tests are carefully discussed. The principle of flexibility of rate and the importance of recognizing and implementing this with suitable reading action is carefully explained. An index of flexibility (the difference in reading rate between easy and difficult material read for the same purpose, and the difference between material at the same level of difficulty but read for two distinct purposes) is calculated from the informal test of flexibility. A brief review of previewing techniques, the use of organizational aids, phrase reading and idea collecting is given.

After the initial period of testing, evaluation, and preliminary discussion of techniques, the next sessions are devoted to exploring flexibility according to difficulty of material. For most people, difficult, unfamiliar or scientific vocabulary is a more obvious signpost to slow down rate of reading than are difficult concepts. Parables and allegories, for example, often use deceptively simple language, yet their concepts may be far from simple. To illustrate, timed selections of varying levels of difficulty are given, with the same set purpose and always followed by a comprehension check. Easy selections may come from such graded materials as McCall-Crabbs, Guiler and Coleman, Reader's Digest Skill Builders. Difficult selections may come from Guiler and Coleman (upper levels), Guiler and Raeth, Wise, Morris, Bradshaw and Walker, or from mimeographed editorials checked via readability formulae. In each sample reading, the results are discussed to see why the timing can and should be paced to the level of difficulty of the selection, and to bring in bold relief the difference between very easy and very difficult material so far as rate is concerned. Actual practice in speed is then begun, always with comprehension checks. (Eighty per cent correct is arbitrarily considered acceptable.) Since even in a homogeneous group, there are differences in reading levels, it is well to use a graded series, such as the S.R.A. kit rate builders, for the students can proceed individually. When they have made sufficient progress to the higher levels, practice is then instituted with other materials, at both easy and difficult levels, to practice the ability to shift speed.

In the same way, with preliminary examples and then much practice, the three main varietal forms of rate according to purpose, namely skimming, rapid reading, and study-type reading, are explored. Again records are carefully kept, and the principle of which speed in what specific reading situation represents the optimum is discussed following each session. At the end of the training period, the students are again tested to check gains, especially in flexibility. Since versatility in rate is demonstrably a practical, efficient aspect of reading, the girls are highly motivated and make appreciable strides.

Understanding the practical wisdom of varying the reading rate commensurate to the needs of the particular reading situation, and sufficient practice in the use of this principle appear to be not only rewarding as to results, but sufficiently vital to incorporate into the reading instructional program as a whole.

## 3. Teaching Reading and Physics Simultaneously

HAROLD L. HERBER

WHO WOULD ever think that these students could have a reading problem: above average ability; capable of high scores on college boards; enrolled in honors courses. *Prima facie* evidence would indicate that they have good control over basic reading skills. But the consternation they and their teachers experience belies the evidence.

It is within the broad framework of reading—reading as a thinking process—that these students need instruction. Rather than reading actively at maximum efficiency, they often read passively, inefficiently, and with wasted motion. Years of training have developed their efficiency in identifying, recording, memorizing, and repeating facts. Unfortunately, however, few of these students have had training in formulating and applying concepts, because most teachers wrongly assume the students already possess this skill. This lack of training handicaps the students' performance in advanced courses.

The Project English Demonstration Center at DeWitt, New York has been organized to show that reading instruction can be part of the course content in all subject areas, providing for students at all ability, achievement, and grade levels.

This paper reports the results of such instruction given to bright students in an advanced (PSSC) physics course.

### The Problem

Students learn physics inductively in the new curriculum. They conduct experiments and record their observations; observe teacher-conducted demonstrations related to the laboratory experiments; refine their generalizations; finally read the text, which expands the principles and explains the observed phenomena.

Students at the Center experienced difficulty in developing and handling the concepts in the text. Asked to identify, list, and memorize the facts, they had no trouble. However, asked to formulate the concepts, showing their interrelationships, applications, and implications, these students performed superficially.

The problem was to design materials which would guide the students in developing essential concepts as they read the text, maintaining a proper balance between skills and content.

### The Procedure

A study guide was constructed to accompany the reading of the chapter on "Wave Mechanics." It assisted the students in formulating and relating the concepts. It did not require them to memorize facts or to list the concepts. It required them to use the concepts in solving problems posed in the guide. The students had to think abstractly, developing concept relationships not actually stated in the text.

Two physics teachers had expressed a desire to participate in the experiment. One taught the experimental class; the other taught the control. There were no significant differences between the classes either in ability or in reading achievement.

A standardized test measuring understanding of the content was given to both classes at the end of the unit. The teacher of the control group subsequently repeated the textbook phase of the unit so he could observe the effect of the procedures.

### The Findings

The teachers reported that students formulated the concepts and, encountering their fundamental meanings, handled them in an abstract manner not previously experienced. The teachers reported a great deal of enthusiasm generated by the grouping process. Students had an opportunity to present and exchange their ideas and were actively engaged in "handling" the concepts.

The teachers concluded that this procedure—method and materials—was a time saver. They needed to devote much less time to full-class instruction because most concepts were developed and reinforced in the group activity.

The control-group teacher felt that when his students used the study guides and participated in the group discussions, they developed an understanding of the concepts they had previously missed.

A "t" test of significance showed that the experimental group scored significantly higher on the standardized test (at the .05 level).

### Summary and Conclusions

Though this study had limitations due to size of sample and lack of pre-test on content, several valid conclusions can be drawn:

1. The students were enthusiastic about the materials and the learning process, becoming—consistent with the inductive method—active participants in learning rather than passive observers.
2. The materials and process significantly improved students' learning and greatly facilitated the teaching of the course.
3. Above average students in physics classes do benefit from instruction in reading when it is given simultaneously with subject content by regular classroom teachers.

There is more to reading than identifying and memorizing facts. Concepts must be developed and applied. When guidance is given, students can develop and apply them.

## 4. Analysis of High School "Basal Reading Materials:" Preliminary Efforts

EMERY P. BLIESMER

WHILE an acquaintance with a variety of reading materials used at secondary levels had been given this investigator through his field of work, previous experiences in working with materials had indicated a degree of indefiniteness and vagueness with regard to just what constitutes "basal reading materials" at the high school level. It was therefore decided that a desirable first step in the analysis of materials might be an attempt to have publishers indicate just what was meant by "basal readers" for high school. Consequently, a letter was sent to the central office of each of fourteen different publishers. It was explained in the letter that this investigator was "presently involved in an analysis of junior and senior high school basal reading materials," that he would "like to know which of the materials you publish are ones which you consider being basal reading materials for secondary schools," and that he "would appreciate receiving, if possible, a complimentary set of the latest editions or revisions of such materials." A definition of neither "high school basal reading materials" nor "junior and senior high school" was given in the letter. However, it was assumed that "junior high" would mean, in general, Grades 7-9 and "senior high" would mean Grades 10-12.

The various types of responses received from the companies within a period of five weeks after the letter was sent were as follows (with the number of companies responding in each manner being indicated in parentheses):

1. Letter sent by central office in direct reply to investigator's letter (5).
2. Representative called on, or otherwise contacted, investigator (5).
3. Specific reading materials sent to investigator, with or without letter from company (8).
4. No response to letter (4).
5. Company representative asked what was meant by "basal" (1).
6. Specific materials mentioned in letters (5).
7. Specific materials definitely identified as "basic" or "basal reading" texts in letters (2).
8. Stated in letter that did not publish secondary basal reading materials, although company had materials widely used at junior-senior high level (1).

The following general types of materials were sent by publishers or were referred to as having been sent fairly recently:

1. Literature series for Grades 7-12 (2).

2. The books for Grades 7 and 8 in elementary supplementary basal reading series (1).
3. The extension, for Grades 7 and 8, of an elementary basal reading series (4).
4. A reading series specifically for junior high (Grades 7-9) levels and not the continuation of an elementary series (3).
5. A reading skill development book or series for junior and/or senior high levels, with levels at which these might be used being flexible (3).
6. A modified literature series, with accompanying supplementary reading skills practice materials or workbooks (1).

A further search and a more detailed analysis of "basal reading materials" are planned as future steps. However, previous familiarity with materials and somewhat cursory analysis of materials obtained in response to the initial letter indicate, in general, that the following types of reading materials are presently available:

1. Literature series with or without accompanying books of reading practice materials.
2. Extension of elementary basal or supplementary basal reading series through Grades 7 and 8.
3. Junior high anthologies with reading skill exercises accompanying selections.
4. Senior high anthologies with reading skill practice exercises accompanying selections.
5. A combination of literary and basic reading skill development materials (represented by a number of the previous types).

The "preliminary efforts" which have been described appear to warrant a few tentative "conclusions" and comments, as follows:

1. The term "high school or secondary basal reading materials" is still a rather vague and indefinite one and is in need of delineating and clarifying.
2. The amount of "basal reading" material available for senior high school levels appears to be considerably limited. (The great majority of materials sent or referred to were for junior high levels.)
3. The extensions through Grades 7 and 8 of elementary basal reading series, while mentioned by a number of representatives, do not appear to be regarded seriously as "secondary basal reading material."
4. There appears to be some disagreement between companies and teachers as to whether or not certain materials used at secondary levels are "basal reading materials." (A number of materials available and used in schools were not referred to by some publishers.)
5. Publishing companies tend, in general, to be somewhat noncommittal or vague with regard to what is meant by "basal" and/or whether or not they have such materials.

## D. COLLEGE

### 1. Reader, Writer, and Rhetoric

PHILLIP SHAW

THE WORD "rhetoric" once was a respectable term. In the middle ages the study of rhetoric was required of baccalaureate candidates. Recently, various specialists of speech, linguistics, grammar, and literature have re-elevated the study of rhetoric both in the library and in the classroom. Briefly, the student of rhetoric believes as follows: Authors write to communicate; they pen their ideas with a particular audience in mind, and they write deliberately to influence the judgments and sympathies of this audience. The devices that writers employ to influence their readers comprise the so-called "rhetoric" of their writings. Readers who expect fully to comprehend writers must note the writers' rhetoric.

When a historian describes one tariff as "protective" and another as "a harsh reprisal," by the first term he is trying to influence the reader to approve, and by the second to disapprove. When a scientist characterizes chlorinated water as having "a disagreeable taste," he is seeking the reader's disapproval. And when he goes on to state that the addition of ammonia to water before a chlorine treatment is an "advantage," he wants the reader to approve of this chemical combination. Both the historian and scientist just quoted may be wrong in fact or from a reader's view-point. Whether, however, the author is right or wrong in his judgment is not the point at the moment. The point is that the author is a thinking human being wishing to transmit his judgments and sympathies to his readers, and that the reader should be a thinking human being striving for understanding of the judgments and sympathies of the writer.

A writer's rhetorical efforts to influence his reader often are statements of a cause or result, or, in terms of human behavior, statements of motives or conduct. A historian writes: "In view of the threatening nature of international relations in 1947, Congress combined the Army and Navy into a single Department of National Defense. Congress hoped that such unification would increase our military strength." The identification of a cause (a threat to the country) and the expectation of the result (again in the country's strength) is the author's rhetoric, the means by which he intends to influence his readers' judgments. To turn to literature, when Flaubert informs his readers that Emma Bovary was "incapable of understanding what she didn't experience, or of recognizing anything that wasn't expressed in conventional terms," Flaubert is thereby telling the reader exactly how to judge Emma's conduct. However closely a particular reader resembles Emma herself, this reader should not sympathize with her.

Writers about science, especially in textbooks, also seek to shape their readers' impressions. Consider the statement that "the fascinating study of the cosmic rays on living things is advanced in scientifically equipped laboratories by the use of generation after generation of white rats." Note the rhetoric that induces positive feelings: the words "fascinating," "advanced" and "scientifically equipped," as well as the expression "generation after generation of white rats," which means that some of the rats survive.

The judgments in the passages just quoted should not be condemned as "nonobjective writing." Think of the result if their authors stoically had purged themselves of judgments. First, the absence of rapport between reader and writer would make the work as lifeless as bad textbooks. Those textbooks that students find difficult to read often make unfair demands upon their patience and interest because needed rhetoric is lacking. Secondly, a writer who refuses to influence his readers will avoid editing, such as classifying and indicating the relative importance of ideas by special expressions (like "foremost" and "of secondary interest"), 1-2-3 enumerations, meaningful titles and headings, italics and bold-face type, and the like. The author who refuses to tidy up his ideas for his readers cuts many potential friends out of an experience of communication with him.

## 2. A Reading Program in a Community Junior College

IMOGENE FREER

As HIGH SCHOOL GRADUATES come streaming through our college doors, the clarion call is sounded loud and clear for more college facilities for students on every ability level from all walks of life. One answer to this problem has been the gradual development of many two-year community junior colleges. A community-centered college differs from the traditional college and university in many ways. One outstanding difference is that course offerings and activities are geared to meet the needs of the local community. Another basic difference is that, while most colleges demand certain entrance requirements, a community junior college has an "open door" admissions policy so that "any high school graduate, or any person over 18 years of age who seems capable of profiting by the instruction offered, is eligible for admission."[1] Because of this liberal admissions policy, there is a greater degree of heterogeneity among the student body than in a traditional college. To provide post-high school education for all students the community junior college has four basic objectives: to give preparation for advanced study, to provide for vocational education, to give a general education, and to supply community services.

It seems that the objectives of a good developmental-remedial college reading program are ideally suited to those of a junior community college. Both want to aid the individual, whatever his ability, to realize his highest potential. Both are interested in preparing the undergraduate for successful advanced work in a four-year institution and to "save souls" from dropping out of college. The junior community college serves the local community, just as a reading program is built around the needs of the community. Hoeglund, dean of a western junior college, says that "as junior colleges become larger the tendency is to shirk, if not scoff at, the remedial function of a junior college. In some junior colleges remedial is a nasty word. If this sophistication continues, the day may come when we will need to call on counterparts of the C.C.C. and the N.Y.A. to perform this function."[2]

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[1] James W. Thornton. *The Community Junior College*. New York: John Wiley and Sons, Inc., 1960, p. 35.

How do junior college freshmen differ from freshmen in a senior college? Seashore found that on The College Qualifications Tests the median score for junior college freshmen is near the 25th percentile for senior college freshmen.[3] Generally the scholastic scores on the College Qualifications Test are higher for the transfer group than for the terminal group. A large proportion of junior college transfers is at least as able as the upper three-fourths of senior college freshmen. The terminal students are less able than the scholastically-oriented groups in both junior and senior colleges.

Last fall at Odessa College the Nelson-Denny Reading Test was administered to 610 entering freshmen. Approximately 40 per cent checked at the 13th grade level or above; nearly 60 per cent checked below the 13th grade level. Of the ones checking below the 13th grade level, 184 checked below the 11th grade level.

Reading programs in junior colleges actually do not vary much from those in other colleges. Since the student body is smaller, the approach may be somewhat more individually oriented. What really makes a reading program successful in any college or community? The answer is to develop an image. Too often, instructors are apologetic about teaching remedial reading. This feeling may pervade the classroom, the entire school, and finally the entire community. The image to develop is that the reading center is a place where it is fun to go. It is attractively furnished, comfortable, well-lighted, and ventilated. The happy instructor causes the poor reader to catch his enthusiasm. He demands hard work and faithful attendance while building up badly bruised egos, and enabling students to look at the future realistically. If the student can catch a glimpse of what he might become problems of motivation, drop-outs, absences, and all the rest will fade away. I would like to list a few specific suggestions for keeping a reading program vital and successful.

1. Keep your classes small.
2. Know your students.
3. Keep the students happy.
4. Work with other teachers.
5. Offer to help a student study other subjects outside of class.
6. Insist on perfect attendance.
7. Encourage the student to work at optimum efficiency.
8. Talk frankly and realistically to the student about his problems.
9. Sell other faculty members on the contribution a good reading program can make.
10. Let the administration be proud of the reading program.

We need to be reminded often that while learned discussions on methods and statistical data are tremendously important, the most important thing is "the individual." To quote Hoeglund, "In the scheme of things American, there must always be remedial opportunities because the American philosophy is from the bottom up, not from the top down, and this means many people with many problems."[4]

## 3. A College Student's Program for Vocabulary Development

GERALD G. GLASS

THE SIGNIFICANCE of the role of vocabulary development is evident to any student of reading; specifically within the developmental reading program and generally within the academic educational process. In essence, communication is a manipulation of ideas, and ideas almost always need to be expressed in words—or vocabulary. Also, it has been generally accepted that the development and use of ideas themselves are often dependent upon the "vocabulary" available to the reader-thinker.

There are many ways in which a student develops vocabulary knowledge. There are many methods which may be used to assist the student in developing this knowledge. For an insightful and concise statement commenting upon these methods, the reader is advised to examine an article written by A. S. MacDonald of Marquette University.[1]

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[2] Harold A. Hoeglund. "Let's Work on Curriculum," *Junior College Journal,* XXX, No. 8 (April, 1961), p. 440.

[3] Harold Seashore. "Academic Abilities of Junior College Students," *Junior College Journal,* XXIV, No. 3 (October, 1958), pp. 75-76.

[4] Harold A. Hoeglund. "Let's Work on Curriculum," *Junior College Journal,* XXXI, No. 8 (April, 1961), pp. 37-44.

This paper will describe a method which attempts to deal with many basic problems involved in the teaching of vocabulary including the crucial factors of: retention and application, choice of appropriate material, student motivation to improve, realistic learning rate, and avoidance of rote learning.

This writer believes that the *only* effective way to arrive at the meaning of an unknown word used in a particular context is through the dictionary. This implies that the use of *context alone* is inherently inadequate and detrimental to vocabulary development since at its best, it can only give a generalized meaning of the word. Responding to generalized meanings is detrimental to critical reading—the only kind of reading that should be done. The use of the dictionary to discover the precise meaning intended by the author becomes significant when one realizes that the difficult word is most often a word that the honest author had chosen to convey a precise idea important enough to the text to warrant its use.

Recently, this writer has evaluated the context of more than 40 words unknown to college students and has come to the overwhelming conclusion that not knowing the precise meanings of these words limited in varying degrees the reader's appreciation of the author's literary skill.

It may be that the common practice of teaching, from the early grades, that use of context will give the meaning of unknown words has actually been detrimental to the vocabulary growth of students and adults. Too many of us know the generalized meanings of too many words and therefore, too often, do an injustice to authors who use precise vocabulary to convey precise ideas. To say that "we cannot keep looking up words in the dictionary" is not only self-defeating to vocabulary development but suggests that one does not need to read well to read and that the reading process is in a sense an end in itself. Where, if not in an academic setting, should a person be trained and influenced in the importance of searching for accurate meanings as part of the time spent in reading. To do anything less may not give reading a fair chance in the arena of communication media.

Frequently, word lists include vocabulary which is already familiar or too esoteric for a class group or an individual. The sheer number of words included in many lesson or weekly lists makes learning in depth and for usage a relatively impossible intellectual task. The method used by this writer requires his college class to examine their environment each week and to find (only) three to five words which they would be expected to know. They are then required to record on a 3x5 card the words they have chosen to learn. Included on the card are the sentences in which the words were used as well as the precise contextual meanings of the unknown words as described in a dictionary.

The students bring this card to the first class meeting of each week. Initially each person reads his words to the group and makes some comment about the context in which the words were found. The class then forms itself into randomly assigned groups of three or four and within each group a five to ten minute conversation is contrived wherein each student is expected to adroitly include, in an appropriate context, his words for the week. Students often find this quite challenging and enjoyable.

During the week, each member of the class is expected to use the new words three or more times in conversations with family, friends, or faculty. Students often report humorous and eye-lifting responses from their peers and family when they use the seemingly esoteric words.

By the end of a week these new words have been used at least seven times. It is hoped that by this time the word will have become known and will be readily available to the student when he needs the word to express an idea.

This method of assisting in the growth of vocabulary development allows for: (1) selection of unknown words the student is expected to know at his present level, (2) learning of precise meanings,

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[1] Arthur S. MacDonald. "What's in a Word—Vocabulary and Its Development." Huntington, N. Y., Educational Developmental Laboratories.

(3) control over the student's activity while learning new vocabulary, (4) acceptance of a realistic rate of learning, (5) minimizing rote learning by planning for actual usage of new vocabulary, (6) relatively meaningful repetition, and (7) stimulating interest in vocabulary which may generate a personal involvement in vocabulary growth beyond the course requirement.

## 4. The Nature and Nurture of College-Reading Programs

ARTHUR W. HEILMAN

TODAY there is an almost universal respect for reading as a key to learning; and genuine interest in improving reading is found among educators at all educational levels as well as in government, the foundations, and among leaders in business and industry.

College reading programs were quite firmly established in a large number of colleges and universities for several decades prior to this post-Sputnik interest in and emphasis on reading. Thus it would seem that college-adult reading programs would now be in a particularly enviable position for growth and expansion in an environment as favorable as the one enjoyed the past few years.

Yet the truth is that even with a favorable climate college reading programs have not grown or expanded in this period of tremendous growth in college enrollments. There is no evidence that the number of colleges and universities supporting reading improvement courses has increased. There is evidence that, compared with total enrollment, the percentage of college students participating in such programs is decreasing rather than increasing. Shaw presents a summary of data which indicates that only a very limited number of students are served by existing programs.[1]

In reading the comments and opinions of persons actively engaged in college reading programs, one senses a relatively strong current of self criticism and growing dissatisfaction with both past and present reading programs at the college level. This is true particularly with regard to the lack of innovation in teaching procedures and materials and the research being reported in this field.

Recently the president of The College Reading Association was the author of an article entitled "College Reading Has No Future." The opening paragraph reads as follows:

> The academic challenges facing our colleges and universities today threaten to toll the death knell for the college reading programs we have known for the past few decades. Three factors inherent in these programs will inevitably precipitate the extinction of college reading services: 1) the association of college reading with remedial services for the academically inadequate, 2) the over-emphasis on superficial aspects of the reading act—specifically, on gadgets and speed, and 3) the lack of professional identification and esprit among college reading specialists.[2]

Leedy, in a recent issue of *Proceedings of The College Reading Association*, states:

> I may be wrong, but it seems to me that our stock in trade has been scant indeed. Listen to a group of reading people talk, and there are half a dozen principal concepts—most of them twenty years or more old—speed, comprehension, study skills, emotional disturbance, critical reading—and this is the limited vocabulary of our stock in trade.[3]

These are some examples of the many reservations held and expressed by persons active in college reading. Such widespread disenchantment should cause us to look critically at the nature of existing college reading programs. Furthermore, if college reading programs are to survive, we will have to become concerned with how to provide the type of nurture that will make them healthy, academically respectable, and worthy of survival.

The nature of college and adult reading programs has been spelled out in great detail in the various yearbooks of the National Reading Conference, The College Reading Association, and the North Central Reading Association. In essence, the vast majority of reports seem to be mirror images of each other. This same unflattering but basically accurate description could also apply to reported research.

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[1] Phillip B. Shaw, "Integration of Reading Instruction with 'Regular' College Offerings," *Tenth Yearbook, The National Reading Conference for College and Adults*, Texas Christian University Press, Fort Worth, Texas, 1961, pp. 115-6.

[2] Martha J. Maxwell, "College Reading Has No Future," *The Journal of the Reading Specialist*, Vol. 3 (Sept. 1963), p. 3.

[3] Paul D. Leedy, "Can Reading Instruction Meet the Present Academic Challenge?" *Proceedings of College Reading Association*, Vol. IV, 1963, Clay A. Ketcham, Ed., Lafayette College, Easton, Pa.

In terms of innovations in instructional procedures and materials there have been no breakthroughs. There are numerous surveys of college programs in which the authors conclude that college programs are very much alike. Often, these programs have been transferred practically in *toto* into the area of business and industry. Lack of diversity among college programs, while certainly a part of the nature of college reading, is hardly a virtue.

The nature of college reading programs appears to be such that the practitioners in this field are viewing our efforts, our research, and our future with trepidation and misgivings. So far, the efforts to evolve programs which more closely fit the expressed philosophy that reading is a developmental process and thus justifiably belongs on the college campus and in the college curriculum have achieved minimal results.

The proper nurture of college reading implies the need for some radical breaks with past practice and program. Since the limitation of space prohibits detailed discussion of desirable steps which might tend to nurture college reading programs back to a desirable state of health and vigor, a few suggestions are listed in outline form:

1. The reading specialist in charge of the college reading program should involve staff from various academic areas of the university—professors of English, psychology, communication, journalism, the sciences. Many of these persons are aware that much of the subject matter they are interested in helping students acquire must be assimilated through the reading process.

If teachers in these respected disciplines were invited to conduct one or more group sessions of the reading program per term they could help immensely with facets of reading such as how to get meaning from a poem, how to analyze propaganda and advertising, and how to gain the background necessary to analyze editorials as well as current controversial issues in science, political science, and the like.

2. Although we have accumulated a body of literature which implies reading *instruction* at the college level must be individual in nature and be based on accurate meaningful individual diagnosis, our practices and programs are obviously not highly individualized. Actually there is no evidence that college students cannot gain valuable insights, relative to their own reading and the nature of the reading process, from participating in a group oriented reading program. With increased emphasis on large sections in other college curriculums and disciplines we can hardly expect widespread sympathy and understanding for a rigid adherence to a philosophy that college reading instruction must be highly individualized. The readers' responses are highly individualized, but there must be ways in which group instruction can be made effective.

3. The concept that the acquisition of reading ability is a developmental process must be stressed to both teaching colleagues and administrators. This particular characteristic of the reading process is the only justification for the continuance of college reading programs at institutions which have adopted highly selective admission policies.

4. We should not abandon efforts to help students become more efficient readers through the development of flexibility in rate and skimming ability. However, more balanced programs which stress meaning, critical analysis and concept expansion should be developed. The professional organizations concerned with college-adult reading have neglected these facets of the program. At present there is a dearth of material which deals concretely with "how" critical reading is to be taught.

In conclusion, it might be pointed out that unlike certain other areas of education, criticism of college reading programs has come almost exclusively from practitioners in the field. If the trend continues the material on college reading will soon be as repetitive in regard to criticism as it now is with regard to descriptions of gadget oriented programs and reported research. The future of college reading depends on how quickly significant changes are imposed on present instructional programs.

# SEQUENCE IV INDIVIDUALIZED INSTRUCTION IN THE CLASSROOM

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## A. ELEMENTARY SCHOOL

### 1. Should the Professor Return to the Classroom? or I Taught Individualized Reading in Third Grade

LYMAN C. HUNT

I HAD WANTED to return to the elementary classroom for a long time. Following years of working closely with several creative teachers[1] who had pioneered in the development of individualized reading programs, I decided to try to teach it myself. Accordingly, after ten years, I left the serenity of the college scene for the turbulent turmoil of thirty-two third grade youngsters.

#### Quiet Reading Time

When I arrived on the scene, most youngsters were acquainted with the well-stocked library as well as with the procedure for selecting a book to be read individually. From this base a highly individualized reading program was developed.

The central feature of the program was called "Quiet Reading Time"—a silent reading period varying in length of time from forty to sixty minutes. Each child with a book of his own choice, proceeding at his own pace, read quietly at his seat. It was during this time that conferences were held with individual children. The individual conference with the teacher was essential for it enabled the child to show the teacher the extent to which he had read in a responsible fashion. The success of the conference depends on the kinds of questions asked by the teacher. Perceptive, penetrating questions can give insight relatively quickly into the depth of a child's reading. Questions may be grouped into three major categories; some typical examples of specific questions are given for each category.

I. Appropriateness of the Book: These questions are designed to determine the appropriateness of the choice of a particular book by a particular child.

   A. Why did you choose this book? Was this a good book for you to read?
   B. Was this book hard or was it easy? What made it hard (easy)?
   C. Could you tell what was happening all the time?
   D. Were there places where you got mixed up? Or, were there places where you didn't understand? If so, how did you straighten yourself out?
   E. Should you choose the same kind or a different kind of book next?

Answers to such questions give real clues to how wise a choice the child has made. It is the function of the teacher through guidance to aid each child to make the best possible choice. But the choice belongs to the child; it should be his unless it is clear that he cannot handle this degree of freedom.

II. Appreciativeness of Book: These questions are so structured that the degree of appreciation for the book is revealed. An effort is made to have the reader place the book on a continuum of best liked to least liked of the several books which have been read.

   A. Was this a good book? If "Yes," how good?
   B. Was this not a good book? If

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[1] Sophia Dilling, Phyllis Parkin, Helen Metzler, Margaret Lay, Lorraine Harvilla.

"No," how poor?

C. How close to the top (bottom) would you put it?
D. Was this the best (worst) book you have read?
E. How much do you usually like books of this type?
F. Do you like other books by this same writer?
G. Do you want to share your book?

A reader must learn to make judgments about his choices. All books and stories are not equally good. All books and stories are not equally appreciated by all readers. Only by verbalizing his reactions can the reader determine the kinds of books and the particular books which are highly satisfactory to him. Literary taste can emerge only upon reflection about what is not good.

III. Values gained from Book: Questions of this sort are designed specifically to determine the extent to which the reader has responded to the ideas in the book. All questions lead the reader into making judgments about the worthwhileness of the ideas. This is reading comprehension in its best sense.

A. Did this book tell or teach you something important that you did not know? What new ideas did you learn from reading this book?
B. Which part of the book was most important?
C. What do you think the person who wrote this book was trying to say to you?
D. Tell me a few highpoints of the book.
E. Did something happen in the book that you would like (not like) to have happen to you?
F. How true (imaginary) is this book?

These questions cause the reader to make a judgment through selecting a part or parts. It becomes relatively easy for the teacher to tell whether the judgments made by the child are substantial or superficial. It is not necessary for the teacher to be intimately acquainted with all books read by children to discern the quality of the child's responses.

## 2. Individualized Reading: Some Unanswered Questions

COLEMAN MORRISON

IN AN ATTEMPT to determine whether an individualized approach to the teaching of reading can be successfully implemented, the role of the teacher has come under close scrutiny. Many questions have been posed relative to her competency. This concern appears to be justified since it is perfectly logical to assume that when a teacher with inadequate training and ability assumes total responsibility for determining which skills should or should not be developed, it is likely that most children will not acquire a satisfactory proficiency in reading.

Similar concern has been raised concerning the availability of an adequate supply of materials. Here again it must be pointed out that the absence of sufficient instructional literary fare would drastically curtail, if not preclude, the success of even the best intentioned individualized reading program.

On the other hand, if all teachers are adequately prepared and a plethora of appropriate reading materials are available in every classroom, the focus of emphasis shifts from the teacher to the learner.

From the vast number of research studies related to child growth and development that have been made, it has been established that differences among children are vast and their range is broad. Because of these differences it might be expected that some children would profit more from one type of instructional approach than another. Accordingly the determination of the method to be used depends on the degree to which certain internal and external factors have been taken into account. This is no less true in considering the adoption of an individualized approach where the ability of the child to function independently, without excessive reliance on the teacher, is an essential component. With regard to this, one might logically question whether children who have been rewarded for heavy dependence on parental guidance will function successfully in a setting where the instructional program is primarily learner-initiated rather than adult-directed. Similarly, it might be hypothesized that children exhibiting characteristics of social immaturity, negativism, or withdrawal symptoms would not respond favorably to a program in which they are expected to display the necessary independence, not only in the self-selection process but in subsequent record keeping and reporting. A question also arises regarding the child who is continually rebuked for his exploratory behavior in the home. In this case the inborn characteristics of seeking and self-selection might well become arrested as a result of environmental factors. Can this child succeed in a program of independent activity when such activity is in contradistinction to the manner in which he is expected to function in the home?

The matter of home environment and social class mores prompts still another question. It is apparent from the research that the reading achievement of children coming from the lower socio-economic status is generally inferior to that of children of higher socio-economic status. Included among various explanations for this situation is the assumption that children in many poorer homes are not provided with opportunities to increase their language growth with books, with educational toys, and above all, perhaps, with the stimulation and encouragement to want to learn to read. As a result is it not strongly motivated to want to read and likely that many such children will be even less so when the decision to read or not to read is left in their hands?

In addition to the foregoing, other questions pertaining to the role of the learner need to be raised. Among them: Can the child of less than average intelligence develop sufficient judgment to select reading materials which are most appropriate for his particular needs? Is it justifiable to accept the theory inherent in some individualized reading programs that the child should be taught to read only when he indicates his readiness to do it? Are the benefits which the learner derives from individual attention and instruction equal to those which he might accrue from a program based more extensively on group study, group cooperation, and group learning?

All of these I classify as unanswered questions. By posing them I do not mean to discredit the individualized approach to the teaching of reading. On the contrary I am certain that many children will profit by such instructional techniques. Unfortunately present day research does not provide us with sufficient information to indicate who these children are. Thus in raising some questions concerning individualized reading which come to mind, I am also posing a question relating to the adoption of any instructional program: For which children is this approach desirable and suitable?

## 3. A Reading Program for Six-, Seven-, and Eight-Year-Olds

LORRAINE HARVILLA

IF CHILDREN are to develop a love for reading, understand the value of reading in their lives, and become avid readers, opportunity for reading must be provided. Books must be readily accessible; aid in coping with the intricacies of reading must be supplied when the need is at hand. Educators recognize individual differences in the ability to master the intricacies of learning to read, yet many follow practices directly opposed to this idea. Following a preconceived program for reading with groups of children may not accomplish the chief purpose for reading instruction, that all should learn. Should six-year-olds follow a pattern of all learning a preconceived list of words even though it be at differently paced group rates of speed? Six-year-olds can derive much from handling books that we cannot measure in terms of words pronounced or pages completed at a given period of time. There is much satisfaction and learning gained by simply looking at and talking about the pictures in some books. Six-year-olds should handle books, many books, even though they cannot say the words. We should talk about ideas. Pictures can then become a means of developing a sight recognition vocabulary and learning necessary skills for unlocking unknown words.

Skills of reading are taught in a variety of ways. A sight recognition vocabulary might be developed by the use of words that are necessary and meaningful in the child's school life. At the beginning of the school year some patterns for self-discipline may be defined. Charts related to classroom conduct may be constructed. Another chart may define behavior existencies.

A sight recognition vocabulary is started with meaningful words. It is furthered through the technique of relating unknown words or portions of words to that which is already known (Hunt articles in *Education*).[1] Every school event becomes an opportunity for providing material for reading rather than being a verbal announcement.

Conferences are planned as children learn to work with books and for those who are already reading printed materials. Conferences are of two types: individual and group. Group conferences take several forms: those in which the children have all read the same book, those in which the children have read different books, and those in which children with a similar need in a skills area gather for instruction in that particular skill. These children meet only for the purpose of learning a particular skill. Th[illegible] accomplished each returns to reading his private selection. It is also during conferences (group and/or individual) that an informal technique for diagnosing reading difficulties is valuable. Conference time provides a confidence time for you and the reader. You may page through the book together talking about interesting words, exciting incidents, pointing out "word pictures," selecting a portion of the story that is similar to something that has happened to the child or is like his family, his home, his friends. It's a very personal period for you, the reader and his book. Typical questions asked include: Would you like to have been the person in the story? Do you think he did the right thing? How would you have done it? Is there a place near here like the place in the story? Special effort is made to make the story a vital thing in the life of the child so that reading is a part of the world surrounding him.

At the close of the conference period the teacher circulates among the children to acquaint herself daily with the progress being made by the total class. While this is not a conference in the usual definition of the word it still constitutes a meeting with all so that each one has a sense of teacher contact, and the teacher is satisfied with the knowledge that she knows what all are doing.

The last part of the daily reading program frequently is a time for sharing books that have been read. This is the time you see a puppet show, relive a visit to the circus, hear an original poem or story that had its inception in an interesting book, listen to the radio announcer predict the ending of an unfinished story, view the TV presentation of a book, examine a clay model, or listen as a painted picture is explained (ideas are limitless). It is the time that whets the appetites of other children to read the book next.

A program for six-, seven-, and eight-year-olds may be developed with the following daily plan: (1) Getting organized for the day's work, (2) Skill building, (3) Conferences, (4) An overview, and (5) Sharing.

## 4. Providing for Individual Differences in Reading

HELEN METZLER

READING is fundamentally an individual skill. When instruction most nearly meets the individual's needs, personal growth is emphasized and the material is subordinate to the reader.

If the child is stimulated to seek reading activities and benefit from them, he will become involved in establishing his own learnings.

If the child is encouraged to "read in depth" he will be able to think about what the author has said to him. He will be able to apply what he has learned to his own life and become a better person because he has read and reacted to the "right book at the right time."

We can provide for individual differences by diagnostic teaching. We can observe how the child plans and how he uses his skills to solve his problems. By means of individual and group discussion we can discover his interests and reactions. We must be sensitive to his unexpressed desires. We must begin "where he is."

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[1] Lyman C. Hunt, "Individualized Reading: Teaching Skills," *Education*, May, 1961; "The Right Questions About Phonics," *Education*, May, 1962.

The next step is to help the child to select a book and read it by himself. He is guided to choose a book which follows his interests. He learns to evaluate it in the light of his own level of understanding.

During the silent reading, done by himself and at his own pace, the "pressure" to help himself with words comes from the book itself. He tries all the "sounding" knowledge he has and will learn new soundings by discovery, going from the known to the unknown.

The concept of self-selection and pacing brings a new element into the classroom. Group procedures are not eliminated but the number of groups is increased. Groups must be flexible, temporary, and formed for teaching a particular skill or sharing of ideas gained from reading.

Teaching a child to help himself requires time and patience. The secret to success in this accomplishment is the individual teaching that is possible because hours are saved when we do not teach what is already known or what the child is not ready to learn. The teacher explores many aspects of the child's reading by careful use of open end questions which do not attempt to lead toward an obviously desired answer.

Naturally, records must be kept. However, it is not so much how they are kept but how they are used.

In evaluation, this individualized approach seems to offer the greatest opportunity to measure the child's progress in reading. In a detailed study done a few years ago I found that a total of fifty-five different books were profitably used in a one and one-half hour session. How satisfying for both child and teacher!

As a child works either individually or in a group, ways in which he is personally involved with reading are evident. For example, one child's report to the class on *The Nutcracker* by Daniel Walden was in the form of an original film strip planned by himself. We had discussed during our individual conference the most interesting way to involve the class. He used the record player and a student helper played Tchaikovsky's *Nutcracker Suite* as certain dances were shown. This led to a study of Tchaikovsky's other music, his life and to the music and lives of other composers. The children themselves began to compose music and four children began piano lessons. We wrote to Opal Wheeler thanking her for writing so many books for children on the lives of composers. Such interest was shown that we invited the boy's mother, an accomplished musician, as a resource person.

When we have consistently provided for individual differences, an able student will prove that he accepts the challenge to push himself to the limit of his ability. The child who has had a difficult time and a series of failures because materials were too hard, can be encouraged to find books which are comfortable. He will begin to think for himself and realize that his opinion has worth and value for the group. The average child will have a broader reading experience and will develop the ability to evaluate critically. Children will be eager to take books home, join the public library, and share their enjoyment of books with others. Learning through reading becomes a rich experience and reading itself becomes natural and rewarding.

## B. JUNIOR HIGH SCHOOL

### 1. Evaluating Research on Individualized Reading

HARRY W. SARTAIN

IN A relatively good experiment Frederick R. Walker[1] assigned three equivalent heterogeneous classes of seventh grade pupils to three different instructional approaches for six weeks. The children in the first class were taught with varied materials suited in difficulty to the ability and the special difficulties of each individual. The second class used materials selected from the SRA Reading Laboratory to fit each child's reading level. Members of the third class, called the control group, all used the same basic seventh grade textbook and workbook with no supplementary reading materials provided; the author refers to this as a "conventional" approach.

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[1] Frederick R. Walker, "Evaluation of Three Methods of Teaching Reading, Seventh Grade." *Journal of Educational Research*, 54 (May, 1961), [illegible] 356-8.

Progress in comprehension and vocabulary was measured by using two forms of Triggs' Diagnostic Reading Tests. A t-test analysis of the data revealed no significant differences among the mean gains of the three classes. However, the lower halves of the first two classes made significant progress during the six weeks, while the lower half of the single textbook class did not. The author concludes that these results favor an individualized program.

Do they? The answer depends upon whether one means "individualized reading instruction," which is instruction differentiated in various ways, or "individualized reading," which is a specific method of teaching each child quite separately.[2]

## Specific Method or General Principle?

Certainly this study supports several others which have proved conclusively that children make more progress when instruction is in some way differentiated to match varied growth levels, than they do when all pupils are expected to work at the same level.

When writers quote this study to support the individualized reading *method*, however, they reveal professional naiveté. The authors of all recognized basic programs recommend their materials be used for *differentiated* group instruction along with extensive supplementary reading. Because this control class used only one book in the so-called "conventional" approach, it provides no evidence whatever to be used in comparing the individualized method with the complete basic method.

## Evaluating Research Reports

The fact that studies have been quoted to uphold views that they were not designed to support leads one to raise questions about research reports.

1. *Can quotations and short summaries of research reports be trusted?* By comparing summaries with original reports one can learn which writers are competent to summarize accurately. In a recent article a seventh grade vocabulary study by Eicholz and Barbe[3] was summarized as evidence in respect to individualized reading. Upon reading the report, one finds that the study was concerned entirely with the effect of practice on vocabulary development and could be related to individualized reading only through the gay gambols of a lively imagination.

Beware especially of the writer who obviously is trying to persuade you to adopt his point of view exclusively. In one article an individualized reading enthusiast has quoted a study that seems highly favorable to completely individualized reading, but has blithely omitted the original author's caution that considerably more time was spent in daily individualized reading instruction than in the program with which it was compared. This raises another question about reported research.

2. *Were the control conditions exactly equivalent to the experimental conditions except for the factor being studied?* In the study just mentioned, the difference in the instructional time periods clouds the conclusions; one does not know whether the differences in pupil progress were due to differences in instructional time or method.

A common control error in individualized reading studies is to provide experimental classes with hundreds of different books while limiting basic classes to one book for each reading group. This is one way in which an unscientific experimenter can stack the cards and be assured of the results in advance. If different results are obtained, one cannot judge whether the cause was methodology or variety and quantity of materials. For a better comparison, the basic groups should be given an equivalent collection of books for supplementary reading, as was done in Noall's experiment.[4]

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[2] Ruth Strang. "Controversial Programs and Procedures in Reading." *School Review*, 69 (Winter, 1961), pp. 413-28.

[3] Gerhard Eichols and Richard Barbe. "An Experiment in Vocabulary Development." *Educational Research Bulletin*, 40 (January, 1961), pp. 1-7, 28.

[4] Mabel Noall. "Automatic Teaching of Reading Skills in High School." *Journal of Education*, 143 (February, 1961), pp. 27-31.

3. *Did the novelty of the experimental situation affect the results?* Variety usually produces improvement in work. The novelty effect may be offset by employing the new procedure with both the experimental and control groups for a time before the pretests are given, or by making both the experimental and the control procedures different from previous work.

4. *Were the data adequate and accurate?* Tests must be valid, reliable, and uniformly administered in order to produce data that can be used in worthwhile research. Also, they should provide detailed information that will make possible the study of subtle, as well as obvious, factors in pupil progress.

5. *Were the data treated statistically to determine whether differences in achievement of experimental and control groups were great enough to be considered significant?* It is impossible to tell whether small differences in averages of raw test scores could have occurred by chance unless one uses a modern statistical method of analysis.

6. *Does the available evidence support the conclusions that are offered?* The strongly biased person is tempted to present conclusions that go beyond the scientific findings. Another mistake is that of assuming that similar basic results will be obtained in different situations.

As yet we do not have enough research to make definite conclusions about individualized reading in the junior high school. However, the carefully done studies in elementary classes, as well as Noall's interesting work with older students, suggest that both individualized reading and differentiated basic programs have values which should be considered by teachers.[5, 6]

## 2. Individualizing Instruction in the Reading Skills Class

STELLE FEUERS[7]

THIS IS ONE of what is hoped will be a mounting series of descriptive reports which chronicle the diversity of approaches, techniques, and organizational patterns associated with reading improvement programs.

Change, for the most part, is evolutionary—not revolutionary—in nature. And one of the most fundamental mechanisms of change in education is, in the final analysis, the acceptance or rejection on the part of the classroom teacher of applications and developmental practices.

Clymer,[1] Harris[2] and Traxler,[3] among other authors, have stressed the need for reports of evaluations of new reading programs and classroom techniques once they are put into operation.

In the fall a limited number of remedial reading classes referred to as reading skills classes were added to the curriculum for students in grades seven through twelve in the Beverly Hills Unified School District.

Remedial reading classes traditionally are grouped homogeneously, according to age, grade, and reading level. They usually are associated with the student of poor scholastic ability. Because of the departmentalized organization of junior and senior high school classes, difficulties arise in terms of scheduling students of like grade and reading level for remedial reading groups. Furthermore, when it comes to the question of pupil selection, at least two types of students emerge who could benefit from the program. Each gives evidence of a wide discrepancy between reading ability and potential (the criterion for selection), but one is reading below grade level and has poor scholastic achievement, and the other is reading at grade level and has good scholastic achievement. Having to decide between them creates a problem although traditionally, the academically poor student is given priority. There is always inherent in any remedial program, the problem of stigma. Even the greatest of care may fail to eliminate, completely, adverse atti-

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[5] Mabel Noall, *op. cit.*

[6] Harry W. Sartain. "Individualized Reading, An Annotated Bibliography." I.R.A., 1964.

[1] Theodore W. Clymer. "The Real Frontier in Reading Research." *The Reading Teacher*, 12 (Dec. 1958), p. 95.

[2] Theodore L. Harris. "Implications for the Teacher of Recent Research in High School Reading." *High School Journal*, 39 (Jan. 1956), pp. 194-206.

[3] Arthur E. Traxler. "What Does Research Suggest About Ways to Improve Reading Instruction?" *Improving Reading in the Junior High School*, pp. 5-15. Proceedings of Conference, December 13-14, 1956. Department of Health, Education and Welfare, Office of Education, Secondary Schools, Bulletin 1957. No. 10. Washington 25, D. C.: United States Government Printing Office, 1957.

tudes toward these classes.

In the Beverly Hills schools it seemed that the problems associated with pupil selection, with scheduling, and with stigma could be circumvented by individualizing instruction in the reading skills class. In addition, other benefits might accrue from its utilization. As a result, referrals were made by the guidance counselors solely on the basis of a wide discrepancy between reading performance and potential, irrespective of scholastic achievement; and students were scheduled at random into classes coincident in time with their study hall period. Due to the random placement, students in each group spanned a wide range in all areas—for example, chronological age, up to four years; grade level, three years; reading level, six years. Intelligence quotients ranged from 90 to 130.

A daily, individual program was developed for each student based on his particular reading needs and interests, and all materials assigned to the student were on his reading level. Progress records were kept by the student. Answer keys were available which made all materials self-checking, and the students corrected their assignments immediately upon completion. Continuous diagnosis accompanied the planning of each program.

Reading materials were selected to suit each child's instructional level and need. Much material was self-selected by the student. In order to develop and sustain interest, a wide variety of source materials of differing lengths and content was used. At least three items were planned for each daily assignment. These were varied in kind and length so as to provide a change of pace.

Although experience with this program has been limited, it is possible to report certain observations. The mixing of age and grade groups seems to have eliminated the stigma usually associated with narrowly homogeneous reading groups. Furthermore, the contact with good students in the reading class seems to give the poorer student definite goals for which to strive. Individualized instruction also enables students to be added to or deleted from groups, or to shift from one group to another at any time without disrupting the program. Another plus factor is that cost for this type of program is comparatively low. It is entirely possible to do an effective job with, for the most part, one copy of each book used.

Currently, the program is functioning smoothly, student interest is high, student reading gains appear to be good. However, without appropriate research techniques, no definite scientific conclusions can be made.

It is considered essential that we pursue research—more and more of it to get a permanent, solid basis under our methodology. But for better or for worse, it is random trial and error, rather than rigorously controlled experimentation, which tends to characterize current classroom practices. For the difference between the scholar and the practitioner is that the scholar can suspend judgment until scientific validation is achieved, but the practitioner is faced with a daily, hourly choice; and, therefore, must make fundamental decisions. As a result, the classroom is the center of the developmental process as distinguished from the formalized research process. And the recording of the teacher's experience becomes critical in the search for developmental applications and techniques both emergent *and* traditional.

## 3. Controversial Aspects of Individualized Reading

LILLIAN R. PUTNAM

AT THE OUTSET, I wish to state that I consider the advantages of individualized reading could outweigh the disadvantages. Although the professional literature abounds in prolific assertions of what such a program should do, several controversial aspects still remain. My comments are based on observations of classes and programs in progress—of what is actually happening—not of what is purported to happen. These criticisms can be divided into two categories: (1) those inherent in the plan itself, which I believe stand a minimal chance of improvement, and (2) those functioning now, which could be corrected.

In the first category I observe the following:

1. The time lapse between conferences

is too long. A child reads or "struggles" with his chosen selection until his teacher-conference. This may vary from two to five days; meanwhile he continues to make errors, usually without correction. In one class, a child read a story about an old man and a "termite" for four days. On the fifth day during his conference, he discovered the word was "turnip." No wonder he had missed the comprehension and humor. This type of incident is too commonly repeated and the criticism is intensified with "slower" children because they need more teacher help. However, schools operating on a daily reading-language arts bloc seem to experience fewer of these problems.

2. The need for a specific skill has passed before it is taught. It is only after the child has read the book, or a good portion of it, that the teacher discovers his need and teaches the skill. This, it seems to me, is the reverse of a good learning procedure.

3. Many advocates of individualized reading say, "Teach skills in groups if the need exists." The practical difficulty here is that the teacher frequently teaches one skill to four or five children before she realizes that it was a group need. This contradicts the most economical use of teacher time. Having the same class consecutively for two years tends to reduce the problem, but this situation is minimal in junior high.

4. Advocates of individualized reading state that a logical sequence of skills is taught. I see skills being taught, but I disagree that the sequence is logical. If a skill is taught when it is needed, as advocates claim, it can and frequently does violate the learning principle of proceeding from the simple to the complex. For example, a teacher taught a child how to syllabicate three syllable words because the need arose in his book. Weeks later she discovered he did not know prefixes, suffixes, compound words, nor had he been given any auditory training which would normally precede, in a logical sequence. One antidote for this criticism is to maintain a continual rating on an individual inventory of specific skills. This could be transferred with permanent records to each new teacher.

In the second category, I would place the following:

1. This plan places maximum demands upon teacher competency. To function adequately, teachers must know reading programs, not one grade alone, but complete programs from kindergarten to grade 12. They must know a logical progression of skills, and many ways of presenting them. They must be able to diagnose errors quickly, and have readily available, either commercially or personally prepared, exercises to give practice and to reinforce the skills taught. All of this must be at the teacher's finger-tips, available immediately during the conference as each need is evidenced.

In my extensive observations of classroom practices, I have seen only a minimal number of teachers who demonstrated adequate competence in these areas. The data of the "Harvard-Carnegie Report: The Torch Lighters," indicate reasons why this minimal competency exists.

This condition could be greatly alleviated by upgrading and intensifying required courses in the teaching of reading for all public school teachers, kindergarten through grade 12, especially for those teaching individualized reading.

2. Many administrators have initiated individualized reading without sufficient groundwork and preparation; frequently chaos and frustration result. A few quick seminars coupled with administrative edict and a desire to be on the frontier of "something new," do not insure the success of any program. Success can be insured by more careful preparation and spadework and by supplying practical professional in-service training in areas of record keeping, diagnosis of difficulties, and sequence of skills.

As stated previously, the advantages of an individualized reading plan could outweigh the disadvantages, but intrinsic controversial aspects still remain.

# C. SENIOR HIGH SCHOOL

## 1. Means Versus Ends

MARTHA GESLING WEBER

LIKE DEMOCRACY, the term "individualizing instruction" is a good term to use. Today, many procedures in reading are labeled under the term individualizing instruction and are sold to teachers and to the general public under that label. Because currently the label is a good one, the package may be accepted without carefully evaluating the content, the use to which the content is to be put, or the relationship between the content of the package purchased and the content of other packages that have previously been purchased.

Our concern about individual differences is not a new concern. However, in this century, writings such as those of Darwin, Freud and Dewey have forced us, as never before, to pay attention to the individual. At least four general approaches to the individualizing of instruction in reading can be identified:

1. Individualizing instruction through VARYING THE RATE OF PROGRESS. For many years the idea that there are differences in rates of growth has been accepted by educators. To provide for differences in rate of growth, teachers have varied the rate of progress. Students go through the same materials, but at different rates. An example of this approach would be the use of the many programed materials which are on the market today.
2. Individualizing instruction THROUGH VARYING MATERIALS. Here the concept of self-selection, with its stress on differences in interests, and that of readability, with its stress on differences in level of difficulty, have received much attention from people in the reading field.
3. Individualizing instruction THROUGH VARYING METHODOLOGY. Questions such as the following are asked: Should the teacher teach the class as a whole, use small group discussions, or permit each student to work on his own with individual counseling when a problem arises? To what extent shall the teacher rely on textbooks, on non-textbook materials, on audio-visual materials, on direct experiences such as field trips as the purveyors of ideas?
4. Individualizing instruction through VARYING ORGANIZATIONAL PLANS. Grouping on the basis of age, of achievement, of intelligence, of interests, of social maturity have all had their proponents. Shane in a recent publication lists thirty-five major educational plans for coping with individual differences.[1]

From administration, curriculum and psychology—to mention just a few of the areas—have come a multitude of suggestions and recommendations for individualizing instruction. And certainly the experts in the area of reading have not sat quietly by. Often the acceptance of one of these approaches has been seen as the solution. Occasionally we even find one approach pitted against another as if the solution to the problem of individualizing instruction were an either-or situation. As more and more teachers and administrators jump aboard one of the bandwagons labeled individualized instruction, some people have become concerned by what seemed to be a fragmentation in the solutions offered and an overlooking of the end goals to be achieved. It almost would seem as if the current emphases on WHAT has been done to individualize instruction and HOW it has been done have hidden the important WHY it has been done.

Why individualize instruction? The answer you say is obvious—to meet the needs of individuals. But at least two questions are raised by the answer: What are the needs of individuals? Why meet the needs of individuals?

What are the needs of individuals? It is well to remember that in some ways we are like all other individuals and so have common needs. In some ways we are like some other individuals and so have group needs. In some ways, we are like no other individual, and so have needs that are unique. Certainly the needs of individuals are many and varied. As we talk about individualizing instruction are we concerning ourselves (1) with the needs the student shares in common with all human beings, (2) with the needs he shares in common with the various groups in the culture with which he is identified, or (3) with the needs which are uniquely his? Sometimes as we strive to meet individual differences as students grow IN reading, we overlook the need for their growing THROUGH reading.

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[1] Harold Shane, "The School and Individual Differences," *Individualizing Instruction*, Chap. VIII, Sixty-first Yearbook of the National Society for the Study of Education, Part I. Chicago: Distributed by the University of Chicago Press, 1962, p. 49.

Why meet the needs of individuals? We meet the needs of individuals because in our society we believe in the intrinsic worth of each individual. Believing this, our society expects from each individual a respect for the intrinsic worth of every other individual. Tyler and Brownell in a thought-provoking summary of the facts and issues involved in the individualizing of instruction present our dilemma.

> In a homogeneous, static society the planning and administration of appropriate schooling for its members would be a relatively simple matter, rather easily attainable. Our American society, however, is neither homogeneous nor static. Yet, the basic function of our schools must be the same, namely, to serve the best interests of our society. In order to maintain its stability, our society, though it be progressive, must insist upon conformity in many, many matters—and the schools must educate in such a manner that its members will conform whenever such conduct is essential and desirable. At the same time, in order to assure its evolution, our society must with equal vigor insist upon diversity—and the schools must educate accordingly. . . .
> The task of the school is, therefore, two-fold: It must foster conformity without sacrificing diversity; and it must encourage diversity without preventing conformity. The conflict in ends is self-evident; but the route to the successful completion of the task is not so apparent. . . .
>
> So, we conclude as we began: Human variability is real, inevitable, ineradicable, desirable, and indeed essential. Nothing less than uniform acceptance of these facts and full recognition of their implications for education and for society will suffice even as a start toward the individualization of instruction. . . . In our schools we must foster both conformity and diversity, neither at the expense of the other.[2]

*Summary*. The present emphasis on the individualization of instruction is a needed one. However, as teachers try to individualize instruction (1) through varying the rate of progress, (2) through varying methodology, (3) through varying organizational plans or (4) through varying materials, they need to recognize each of these approaches as but a part of a total context. In addition, they need to see the individualization of instruction as a means to an end, not as an end in itself.

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[2] Fred T. Tyler and William A. Brownell, "Facts and Issues: A Concluding Statement," *Individualizing Instruction*, Chap. XVII. Sixty-first Yearbook of the National Society for the Study of Education, Part I. Chicago: Distributed by the University of Chicago Press, 1962, pp. 326-327.

## 2. A Comparative Study of Individualized and Group Reading Instruction with Tenth Grade Underachievers in Reading

LAWRENCE GOLD

BY FAR the greatest application of individualized reading instruction has been on the elementary school level. The present study was conceived to parallel as closely as possible the theory and practice of individualized reading on the elementary school level, but to apply this type of reading instruction to underachievers in reading at the tenth grade level. The study was initiated some three years ago, and completed last year, as a doctoral dissertation under the sponsorship of Dr. Nila B. Smith of the School of Education of New York University.

The major purpose of the study was to investigate and compare the effectiveness of group and of individualized reading instruction, respectively, for the improvement of reading achievement of underachievers in reading at the tenth grade level. A related aspect of this study was the evaluation of the effectiveness of these programs for improvement in personality adjustment and level of self-perceived reading problems and needs.

The subjects were selected from the tenth grade of the Garden City High School, a suburban school within commuting distance of New York City. The investigator served as the reading specialist in the high school.

The initial step was to apply the Nelson-Denny Reading Test[1] (revised edition) to some four hundred students who comprised the total tenth grade population. The experimental population consisted of forty students who scored in the lowest quartile of their tenth grade population, as well as below the 50th percentile in comparison to the national norm. The Henmon-Nelson Test of Mental Ability[2] (revised edition), was utilized to identify subjects who were underachievers in reading. The range of underachievement in reading, as determined by a comparison of a subject's reading-age and mental-age equivalents, was from one month to more than seven years.

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[1] M. J. Nelson and E. C. Denny, The Nelson-Denny Reading Test, Houghton Mifflin Company, Boston, 1960.

[2] T. A. Lamke and M. J. Nelson, The Henmon-Nelson Tests of Mental Ability, Houghton Mifflin Company, Boston, 1957.

The relationship between reading disability and personality maladjustment is generally acknowledged. This relationship is perhaps especially strong among adolescents who are underachieving in reading. These students have known considerable academic failure. They may also have been exposed to reading improvement programs in the past, with varying degrees of success. Their self-concept becomes increasingly damaged as they compare their rate of achievement with that of the peer group.

In order to measure any possible improvement in personality adjustment and level of self-concept, several instruments were utilized. The SRA Youth Inventory,[3] and the "Reading Problems Inventory," an instrument developed by the investigator to measure the level of self-perceived reading problems and needs, were applied to pupils in both groups before and after treatment.

The *IR* group, which received individualized instruction, and the *GR* group, which received group reading instruction, were equated statistically at the outset of instruction.

For instructional purposes each group was subdivided into three sections of approximately equal size (from six to eight subjects). Each section received instruction on two alternate days, during periods normally used by the pupils for study. A total of twenty sessions was given to each section, during a time span of approximately three months. The investigator served as the instructor for both the *IR* and *GR* programs.

## Instructional Programs

The program of instruction of the *IR* group was based, wherever possible, upon the principles of seeking behavior, self-selection, and pacing, as formulated by Olson.[4] Each student was informed of the skills which were most in need of attention. The available instructional materials were demonstrated at various times throughout the course of instruction, usually at the beginning of the session. The student was encouraged to select exercises which he felt would be of most value to him. A record was kept by each student, indicating the material used, his evaluation of the contents, and his scores, if any.

Individual conferences with the investigator were an integral part of each session. These consisted of instruction in particular skills, recommendations for future activities, or discussions relative to academic problems. The investigator kept a record of each conference. An average of three students was seen for individual instruction during each session, for periods of time ranging from five to fifteen minutes per pupil. The classroom atmosphere was relatively permissive.

The program offered the *GR* group was more traditional. The investigator offered instruction based upon the needs of the group as a whole. All subjects were engaged in a similar activity at the same time. Group motivation was used wherever possible. The classroom atmosphere was relatively permissive, although the reading activities were structured and varied. The areas which received emphasis were comprehension, vocabulary development, study skills, and rate of reading. No mechanical equipment was used with either program.

## Results

At the completion of the experimental period, each group was again evaluated for the variables of reading, personality adjustment, and level of self-perceived reading problems and needs. The "t" test for correlated means and the technique of analysis of covariance was applied appropriately to the data to determine the statistical significance of improvement.

Individualized and group reading programs, respectively, produced significant improvement in total reading achievement, reading vocabulary, and reading comprehension. Only the *GR* plan resulted in significant improvement in rate of reading. The *IR* plan tended, however, to promote growth in this area. There was no significant difference *between* the groups for these variables, except that the *GR* group was significantly superior for rate of reading.

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[3] H. H. Remmers and B. Shimberg. SRA Youth Inventory, Form S, Science Research Associates, Chicago, 1960.

[4] W. C. Olson, *Child Development* (second edition), Boston: D. C. Heath and Co., 1959, pp. 401-408.

Each group made significant gains in certain areas of personality adjustment. An interesting finding was that each program manifested significant growth in the same areas—My School and After High School. There was no significant difference *between* the groups for improvement of personality adjustment.

Each group made significant improvement in level of self-perceived reading problems and needs. Neither program was more effective for promoting significant improvement in reading ability as evaluated by the subjects themselves.

A "Course Evaluation Sheet" was filled in by each subject at the conclusion of the instructional period. Subjects in the *IR* plan tended to approve of more aspects of instruction and tended to do more independent reading (at home or in study) in all types of material.

The results of the study suggest that the individualized plan of instruction may be usefully applied to underachievers in reading at the high school level. Furthermore, there does not appear to be any decisive advantage for this plan in contrast to the more commonly applied *GR* plan.

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## 3. Individualizing Instruction Through Pupil-Teams

BEARNICE SKEEN

PUPIL-TEAM learning designates a device long used by human beings to learn many things both in and out of the formal educational system. However, cooperative learning among peers has been frowned upon and indeed outlawed in some of our traditional memorize-regurgitate, question-answer, learn-test school environments. To shift to an acceptance of pupil-team learning necessitates consideration of several guidelines.

1. An acceptance that pupil-team learning is one way of increasing learning on the part of youth.
2. A belief that the process, two or more persons working together, is an important and needed skill in today's and tomorrow's reality.
3. An acceptance that time spent helping students learn how to help each other learn is time well spent.
4. An acceptance on the part of the pupils that learning and working together is valued as one way of learning.
5. An assessment of the climate for change before a change in procedure is introduced.
6. A willingness to provide and to encourage diversified learning activities suited to the level of learning and to the rate of learning of the students.
7. The use of a plan or several plans for the organization of the teams which the learners perceive as an effort to help each learn, happily and better.
8. A commitment to helping youth learn is more important than commitment to a procedure.
9. An analysis of one's motives in the utilization of pupil-teams for the enhancement of learning will permit a more objective evaluation of the procedure.

Some situations in which pupil-team learning may be operative include:

1. Proof-reading of any written material before making copy to be read by an evaluating person.
2. Preparing essay question on a given section to be used as basis for review.
3. Preparing short answer questions over given content.

4. Reading same book and discussing, not the plot, but "what the author is saying."
5. Talking together to find the main points of a film, a lecture, or other common listening experience.
6. Writing answers to questions, then talking with partner for additional ideas.
7. Listing items of content, such as heads of governments in the "free" world.
8. Preparing evidence for both sides of an issue.
9. Working out solutions to situational tests—"What would you do if . . . ?"
10. Outlining a section or chapter.
11. Paraphrasing.
12. Applying rules, generalizations, or principles to a new situation.

The suggestion that pupil-team learning is an important procedure is predicated upon the assumption that students learn more and better if they are involved actively in the process. Acceptance of this assumption indicates, then, that the students must be involved in the evaluation of the procedure, also. The teacher and the students, using acceptable assessment techniques, can determine not only if pupil-teams enhance learning but which pupil-team situations give the greater satisfactions.

## 4. Stimulating Reading in the Senior High School

MARIE G. GEORGE

"READING is to the mind what exercise is to the body." Few educators are willing to discountenance Addison's Theory, advanced so long ago, but in 1964 it requires a skillful, dedicated teacher to convince average teenagers that this is so and that students should begin, at least, to see the relationships in the world of ideas that are available to them in books; to reflect upon the ever ancient, ever new flow of human life recorded by writers down through the ages. The young people served by the high school English or reading teacher need to read well.

Let us consider some of the methods used by senior high school teachers to stimulate an interest in reading at the same time reading skills and competencies are being developed. First, teachers are helping pupils to define and keep in mind their purpose. If pupils know their purpose, the chances are good that comprehension and speed will improve. If a teacher asks pupils why they read, they will tell him: (1) for entertainment, (2) to learn about people and places, (3) to locate facts or verify information, (4) to provide information asked for in an order blank or questionnaire, (5) to learn to do or make something. Every assignment should define pupils' reading purposes. If pupils are reading a mystery story, they should know in advance that they are to entertain themselves by matching wits with the detective. In a poem such as Robert Frost's "The Road Not Taken" pupils may be led to relate the author's purpose to their life goals through questions such as these: How many roads in life lie ahead of you? Which one will you take? What kind of work do you want to be doing ten or twenty years from now? When you are forty years old, what roads in life may you wish you had taken?

Our second aim is to help pupils to read at an efficient rate. Rapid reading is not enough. Fast readers are not always good readers nor are the slow readers necessarily poor readers. Teaching pupils to read faster may or may not improve their comprehension. Since speed without comprehension is worthless, it is believed that the greater emphasis should always be placed upon comprehension in a reading program.

The third aim of the developmental reading program must place emphasis on helping pupils to locate main ideas. This may be done by having pupils outline the author's main points in an expository article. They find his main points by locating topic sentences and by noting transitional words such as *first, second, next, then, moreover, finally* and phrases such as *in addition to, the next point,* and *equally important.* These often introduce important ideas. Also, where subtopics or paragraph headings or summary paragraphs are provided, pupils are taught to look for clues to the author's thesis in the title of the selection, in the first and last paragraph, and in accompanying charts, graphs, drawings, and pictures.

All subject matter teachers should teach students to read with critical judgment. Teachers must try to help youth to understand the meaning of life, to harmonize their ambitions with reality, and to acquire values and a sane philosophy of living which will stand up against the stresses and strains of this half-century. Adolescents who are stimulated to read with critical judgment learn to read with appreciation and discrimination. Their minds are alert and open to new ideas and information. They are not fooled or misled by glittering words, high-level abstractions, qualifying phrases, and distorted value judgments. They are mature readers who go behind the verbal symbols and concepts to seek the truth—for only the truth can make them intelligent, responsible citizens.

Whenever oral and written book reports or discussions are assigned, they should contribute to students' lifetime interests in literature and add to their literary growth. Such reports should not require students merely to prepare a summary of the setting, plot, characters, climax and outcome of the book. Students should react to some of their reading in much the same manner as a literary critic who reviews and evaluates newly published literature. Oral book reports may not only serve to motivate reading in new and diverse areas, but may also give students practice in communicating to others personal convictions or vicarious experiences which have influenced their thoughts or feelings.

If high school students are to be motivated and stimulated to more and better reading, the teacher must provide a suitable emotional and physical climate, teach students to fit reading speed to their purpose and to the type of material, use the dictionary in every class, develop a list of most-used words in one's own area and set out to teach specifically a number of them, build assignments around the dual purposes of producing an interest in subject matter learning and of developing reading skills in which the students are deficient, develop readiness by discussing the purpose of the assignment, develop recreational reading through discovered pupil interest, develop ability to interpret character from reading, develop speed through timed exercises, improve reading through the use of the index, develop skills in reading graphs and tables, and guide the students' reading for personal development.

How does one get a senior high school pupil to read? Why should he read? The reading teacher must first be convinced himself.

Reading adds variety to one's life. It adds to one's experience. We can think only in terms of words. Reading is the richest source of vicarious experience. Reading matures us. It awaits our own creativity. Are you able to convince every pupil you serve that this is so?

In your attempt to stimulate reading among high school students I would implore you to use every device at your command to encourage parents to read. You yourself must be readers Talk with students about your reading. Explore the library with them. Have suggestions ready when the opportunity presents itself. Be a resource person in your own right. Don't be afraid to acquaint yourself with "kid" literature. For a change of pace read for fun. Learn to connect books with individuals. Sell books to your students. How long has it been since you read to your students? Revive this seemingly lost art. Don't be afraid to devote some time to reading aloud. It matters not whether you choose poetry or prose. Just let the high school student hear words for a change.

Let your room reflect books, many books, attractively displayed, invitingly accessible, books for the slow learner, the average learner, the advanced. Encourage the pupils to develop their own library, to develop a pride in the ownership of books through the many book clubs that are available. Encourage a free exchange of book evaluation by means of the panel discussion and share them with other groups. Group students so that books they read provide an opportunity for comparison and contrast, for example, *The Old Man and the Sea, Kon-Tiki, Moby Dick*. Provide opportunities for students to be stimulated by their peers. Reach the parents through the mass media, newspapers, television, radio.

The reading teacher in the senior high school must search for every conceivable device to stimulate her students. A technique that works for some may not work for another. Complex as the reading skills are, they are not enough by themselves, because they do not ensure that reading will become a habit. Both teachers and parents need to be concerned that children not only develop the ability to read, but that they also develop a fondness for books. Fortunately, skillful reading and the love of reading reinforce one another to produce the answer to what reading is.

While encouraging reading is highly important, we cannot and should not attempt to accomplish this task ourselves. It is for the student to read, reason, and reflect on the events, people and ideas in his world of reading. We can aid him best with a program of reading aimed at eliciting thought. St. Thomas' words well apply here: "What you read set about to understand, verifying what is doubtful; strive to put whatsoever you can in the cupboard of your mind, as though you were wanting to fill a vessel to the brim." Sister Margaret Miriam of the Bishop McCort High School adds a footnote to St. Thomas' philosophy by saying that "who awakes youthful minds to the merits of thoughtful reading, to the value of precise written expression, has done a small part at least, in supplying the need for greater appreciation of that enlargement and enrichment which is the goal of all true education."

Yes, "reading is to the mind what exercise is to the body." Truly "reading maketh a full man."

## D. COLLEGE

### 1. Problems of Management in Individualized Instruction

NANCY B. DAVIS

INCREASING college enrollments with the consequent increase in academic competition has resulted in greater heterogeneity among students enrolling for reading and study improvement at the Indiana University Reading and Study Skills Center. One class may have students ranging from low skill level and few independent techniques for learning to a high level of skill but inefficient techniques. This increased range of levels along with the always present differences in capacity, experience, and personality emphasized our need for better means of serving individuals within a group.

I use the term "techniques for learning" rather than "reading" because our orientation is toward student success in meeting academic competition. Most of our efforts deal with reading since printed material is still the primary source of learning, but we also cover such topics as lecture notes and the taking of examinations. My way of saying this is that the job of the student is to learn, retain the learning, and then demonstrate that he has learned; my job is to help whatever variety of student comes my way to accomplish these goals.

Because of limitations, background to the decisions for our program is omitted. The following report describes the general procedures followed in our reading course.

Diagnostic testing is the first order of business. In order to sample a wide range of behavior within reasonable time limits, we use selected parts of tests, and assign the diagnostic section of the textbook *Learning to Learn*[1] to be done outside of class.

To help guide the student toward self-interpretation, we have prepared a profile sheet combining all measures so that the student can record and examine results. A general explanation is given to the class on translating these results into practice. The student can make notes about areas not tested.

We have also prepared an index to our practice materials so that a student during individual practice sessions in class or outside of class can locate exercises appropriate to his needs. By way of credit, we selected from the index of the Auburn

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[1] Donald E. P. Smith and others. *Learning to Learn.* New York: Harcourt, Brace & World, Inc., 1961.

Reading Laboratory[2] those titles which we used and added new titles.

To insure an individualized program, personal conferences are required at this time for the instructor and student *together* to work out special practice. We have found particularly useful in diagnosis the sampling of personality measured by the I-S Scales in the textbook. This text was selected originally because it recognized the fact that students must be taught *how* to learn, since knowing how is not an inherent characteristic.

The *I* stands for the dimension Impulsivity-Constriction (related to Flexibility-Rigidity) and the *S* represents Stability-Anxiety. The scores locate the student along these two dimensions and identify certain styles of approaching reading assignments.

Omitting consideration of reliability and validity of any personality test, we can say that these scores serve as an excellent take-off point toward individualizing practice. For example, the student who looks only at the "big idea without bothersome details" is contrasted with the student who "can't see the forest for the trees." Since the two cases have different training requirements, this early identification meets differing needs from the *start* of training.

Other problems of the individual can be picked up at this conference and the suggested program indicated on the profile sheet or index. The student then has a reference guide. Future conferences are scheduled as needed.

In managing small group work or individual practice, we identify three groups. In homely terms they are: (1) those who need only to be pointed in the right direction, (2) those who need just a little push, and (3) those who must be led by the hand. No formal testing is needed; these students readily identify themselves.

General instructional procedure is a topic for lecture, discussion, and demonstration, supplemented by the text assignment. During practice sessions some students may be working with pacing devices, others with vocabulary, others struggling to conquer a psychology text, and a small group meeting with the instructor. In other words, a student is released from the group to proceed on his own. The instructor is by no means released; he must constantly be observing so that adjustments can be made to keep the program operating for both individuals and the group.

Of necessity, much detail is omitted, but perhaps this description of our efforts toward knowing the individual student, knowing our materials, and getting the two together in the right combination will encourage your efforts toward individualizing instruction.

## 2. Reading for Depth in the College Program

BROTHER LEONARD COURTNEY, F.S.C.

OUR PROBLEM as college reading instructors is to develop in the student the depth and independence necessary for individual confrontation with reading assignments, that is, for that reading which takes place in the privacy of one's own study, in the silent communion between book and reading wherein meanings, ideas, and knowledge must be wrested from the pages of the text to be related to course lecture and discussion, compared and integrated with other learnings, and retained for subsequent examinations and professional advancement.

The suggestions which follow derive to some extent from procedures suggested by Brower[1] and Altick,[2] and are recognized, if not thoroughly exploited, in most college reading manuals which usually state that critical reading demands all comprehension skills—but to a very refined degree. It is not new; certainly all reading teachers recommend and encourage critical reading in all its ramifications. It is possible, however, that this technique may provide some new ideas.

Briefly, the technique demands a slow, deliberate analysis of text beginning with the words themselves—their denotational, connotational and allusive significance, and the nuances resulting from conjunction with other words—and leading to the gradual accrual of all elements which results in an integrated apprehension of what the author states, intends, and implies. This is a most profound kind of critical reading: more than inference or conclusion, or tracing cause and effect. Though the process appears to be painfully slow, almost tedious, it alerts the student to his own capacity for detecting every clue to meaning, how such clues relate to one another and to the total meaning, and how they blend into a unity.

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[2] "Your Index to The Auburn Reading Laboratory," *Phases of College and Other Adult Reading Programs*. Tenth Yearbook of the National Reading Conference. Distributed by Reading Center, Marquette University, Milwaukee, Wisconsin. 1961. pp. 17-30.

[1] Rueben A. Brower. *The Fields of Light*. New York: Oxford University Press, 1951; and *In Defense of Reading*. New York: E. P. Dutton and Co., 1962.

[2] Richard D. Altick. *Preface to Critical Reading*, fourth edition. New York: Holt, Rinehart and Winston, Inc., 1960.

The procedure is best demonstrated through the study of poetry, wherein compression and intensity of statement and the usual employment of metaphorical and linguistic devices to suggest meaning afford maximum opportunity and challenge. Since many instructors feel uncomfortable in dealing with poetry—and this particular method does require some skill and familiarity with the components of poetry—it may be adequately demonstrated through prose passages, ideally through the formulation of searching questions. Authorities agree that self-questioning is one of the soundest approaches to meaning; students are generally weak in formulating questions and this procedure assists them in searching analysis and stimulates the kind of thinking and reading necessary to complete understanding.

The following suggestions may be helpful in understanding and initiating the process of "slow reading," as Brower terms it.

1. It is essential not to be bound by a time schedule but to stay with any passage until everyone, instructor and students, is satisfied that the "mass of implications" has fused into a unity. This necessarily precludes use of lengthy passages.

2. The passages employed ought to be particularly challenging, whether philosophical, technical, or artistic. At the initiation of a project, the passages should be suitable to the skill and experience of the group. Not every poem or every passage will demonstrate all points or serve for complete exercise of critical reading skill. At times, the passage may be a fairly straightforward statement complicated by difficult vocabulary or verbal juxtaposition.

3. Questioning should be hierarchical, concentrating first on simple aspects of syntax or structure and moving through successive stages of statement, intention and implication. Occasionally questions may be directed toward simple factual detail which demands intricate patterns of identification or analysis. Although the instructor will do the initial questioning, the object is to arouse the students to self-questioning.

4. In analyzing the total impact of a word or phrase, it is necessary to move from the strictly denotative through connotative expansion to the more elusive interlocutory quality of words used in combination, or in apparent contradiction.

5. It frequently will be necessary for the instructor to identify for the students the particular characteristics which make a passage abstruse; for example, the ideas or the vocabulary may be simple but are obscured by the author's failure to employ customary transitional devices.

6. With progress through a passage, constant reiteration is made of previously identified ideas with whatever development or limitation is exerted by new ideas or implications.

The procedure can lead to a complete understanding of an author's statement and implication. With sufficient experience, it could become a valuable technique in a student's reading portfolio.

## 3. Basic Skills vs. Creativity in Reading

AILENE B. THOMPSON

ANY DISCUSSION of the reading abilities of college students might begin with a consideration of basic skills and end with emphasis on critical and creative reading. While there would always be differences of opinion, a more careful definition of terms might indicate considerable agreement concerning the relative importance of various reading abilities.

What are basic reading skills? All of us would agree that the abilities required for accurate recognition of the printed symbols and in word attack are basic skills in reading. Should we also include abilities used in getting the main idea and seeing the organizational pattern? What are the upper limits? Can we define these limits on the basis of their comparative difficulty or sequential development? I propose to consider basic skills those which underlie or are essential to whatever reading process is taking place: those skills which, in a given situation, are a means to an end.

At this point, I should like to consider some of the contributions of the linguists to our understanding of the reading process. Fries in his book *Linguistics and Reading* concludes his discussion of the nature of the reading process with a description of the three stages in that process.[1] While Fries' method of teaching reading deals with the first of these stages, his comments concerning the second stage he describes seem of particular significance to us as teachers of reading skills. "The second stage covers the period during which responses to the visual patterns become habits so automatic that the graphic shapes themselves sink below the threshhold of attention, and the cumulative comprehension of the meanings signalled enables the reader to supply those portions of the signals which are not in the graphic representations themselves." (This I take to mean the intonation signals, particularly.) Surely we agree concerning the importance of developing skills to the point at which habitual responses free the reader to deal with ideas. Developing concepts which change attitudes can supply the proper conditions for reading improvement, but practice is needed to change habits and develop skills.

Fries' third stage begins when the reading process itself is so automatic that, in his words, "reading stimulates the vivid imaginative realization of vicarious experience." In other words, the reader is free to deal with ideas imaginatively, critically, creatively.

While Fries consideration of linguistics and reading is concerned largely with the first stage in reading development, the transfer stage, and thus with the meanings attached to the sounds of the language, another linguist, Carl LeFevre, is concerned with applying the findings of structural linguistics to the teaching of reading. His book, *Linguistics and the Teaching of Reading*, emphasizes the importance of the meaning-bearing structures of American English. He treats the word as a minor language unit, emphasizing the sentence as the basic unit of meaning. He says intonation is the most important signaling system in American English sentences, followed by syntax, structure words, and word form-changes, in that order.[2]

Reading by structures is further discussed in another text which gives specific suggestions for acquiring this technique. The discussion in the Lloyd and Warfel text of the reader's response, both visual and mental, to familiar signals of structure or pattern suggests that the good reader knows which signals count in reading sentence structure, and that his responses are automatic, requiring little conscious attention.[3]

What do we mean by creativity in reading? Russell suggests four overlapping levels of reading ability with three types of creative reading at the fourth level: reading for implied and inferred meanings, reading for appreciative reactions, and critical reading.[4]

However we define basic skills and creativity in reading, we must consider their relationship to each other. Basic skills provide one of the foundations for creativity. Torrance, in *Guiding Creative Talent*, speaking of the unrealistic or uncertain self-concept resulting when creativity is repressed says, "The really tragic king of disability occurs in the case of the potentially creative individual who never finds anything which challenges him, anything worthy of his best efforts. The trouble is that he fails to learn basic skills and later bogs down because he does not have the fundamental skills for doing the creative work which he desires to do."[5] And later, "Creativity and conformity are not antithetical. We should try for balance between creativity and conformity so that they enhance one another."

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[1] Charles C. Fries. *Linguistics and Reading*. New York: Holt, Rinehart and Winston, Inc., 1962, p. 132.

[2] Carl A. LeFevre. *Linguistics and the Teaching of Reading*. New York: McGraw-Hill Book Company, 1964.

[3] Donald J. Lloyd and Harry R. Warfel. *American English in Its Cultural Setting*. New York: Alfred A. Knopf, 1963, pp. 404-423.

[4] David H. Russell. *Children Learn to Read*. Boston: Ginn and Company, 1961, Ch. 14, pp. 454-458.

I should like to ask one final question. Why is it that all normal children understand and use their native language at a very early age, listening and speaking, and yet many never learn to read it with anything like comparable efficiency? Is it that the visual job is too much for immature eyes? Are our carefully contrived methods of teaching and learning reading so much poorer than the way of teaching and learning the spoken language? Is reading success hampered by the reader's lack of basic skills which should be so well mastered that they become habitual and function below the level of conscious attention? Continued study of language and the learner will provide better answers to our questions.

## 4. Principles for Selection of Methods and Materials at the College Level

PAUL CONRAD BERG

THE FIRST principle in the selection of methods and materials for teaching reading at the college level is that excellent instruction by a well-trained teacher is by far the most important element of any successful program. The director or teacher of a college reading program should at least meet the minimal requirements for the professional training of reading specialists as outlined by the International Reading Association's Committee on Professional Standards. Spache, in commenting on this topic, said, "No satisfactory mechanical substitute for a competent teacher has been devised. . . . Aids are of little value, in and of themselves."[1]

A second primary principle is that the program director be clear in his own mind as to what reading is and in general what kind of experiences are necessary to teach reading most profitably. On such a basis of definition and a detailed look at all possible modifying factors—including his awareness of his students' abilities and problems, and the limitations which are placed on the director in terms of staff size, budget, and time—a clear and practical statement of purpose for his reading program can be drawn up. On this statement of purpose selection can logically be made.

A next necessary step in selection is to be well informed about available methods and materials. The varieties of machines, programed materials, and the so-called packaged laboratories and workbook materials, in addition to the many books and articles dealing with methods of instruction, make this a challenging task. Yet our tools must be selected in keeping with what is known about them through research. For example, studies are presently available which indicate clearly what can and what cannot be accomplished in reading by various training techniques. Yet there are many materials and devices on the market that possess little validity in the light of these research findings. Various devices are advertised that in fact cannot do what is claimed for them, and others perhaps accomplish what is claimed, but the training is of little value to the actual process of reading. A thorough knowledge of current reading and learning research may save the purchaser many wasted program hours and many dollars that could be more profitably spent.

In keeping with a need for research information in selection, it should also be kept in mind that almost any program is likely to show gain. A study by Schrock and Grossman[2] indicated that exercises selected to have no other possible value except motivational produced significant results in reading for an experimental group while a control group having no such training indicated no gain. Apparently, then, methods or materials cannot be selected on the basis of measured achievement alone. Other criteria, including long term changes in reading performance and attitudinal changes, must also be considered.

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[5] Paul Torrance. *Guiding Creative Talent*. Englewood Cliffs: Prentice-Hall, Inc., 1962.

[1] George D. Spache. "Auditory and Visual Materials," in *Development in and Through Reading*, Sixtieth Yearbook, National Society for the Study of Education. Part I. Chicago: University of Chicago Press, 1961, pp. 209-225.

[2] Ralph E. Schrock and Milton Grossman, "Pilot Study: Motivation in Reading," *The Reading Teacher*, 15 (November, 1961), pp. 119-121.

Another criterion for materials selection is that specific training for specific skills should be offered as well as materials for the more general developmental aspects of reading. At the University of Florida, for example, vertical files contain every imaginable kind of skills exercise, carefully indexed with accompanying worksheet and answer card. It took literally years to set up this system, but as it now operates almost any diagnosis can be met through proper selection from these files. Also, each person coming to the clinic has his own personally tailored program planned for him from these very inclusive materials.

Clear and specific transfer value must also be considered in the selection of methods and materials. A student should have a clear understanding as to what a particular exercise or drill will do for him or what it is teaching him. Practice must be clearly tied in to the tasks the student performs daily. The more specific and direct the transfer, the better.

Techniques that offer the student a maximum of self-direction and independence should also be a part of selection criteria. Finding independent success at one's level of instruction is certainly an important part of the learning process. One key to independence in reading is found in materials with a wide range of interest, need, and difficulty level. Even for college students the idea of materials for bibliotherapeutic purposes is a sound one.

Materials must also reach beyond the elementary stages of reading for factual answers to the more challenging skills of critical and creative reading. As a part of growth toward these advanced skills, materials should offer continuous self-evaluation, the more specific and searching, the better. The questions asked after many reading exercises are far from challenging. Evaluative techniques should be devised that truly measure in depth of growth, not just some superficial symptom of temporary motivation.

# SEQUENCE V READING INSTRUCTION INTEGRATED WITH LANGUAGE ARTS

## A. ELEMENTARY SCHOOL

### 1. Oral Base of Language Arts Teaching with Special Reference to Linguistics

ALVINA TREUT BURROWS

ORAL language is the very essence of human communication and language is more than words spoken or written on paper. We need to remind ourselves of this at a time when pressures toward ever earlier teaching of reading to infants find ready space in popular magazines and other publications. We also need to recall that children quite generally use the major sentence structures of our language, a considerable vocabulary, and many nuances of both conversational and semiformal speech by kindergarten years. But even in optimum environments comparatively few learn to read. In recent studies one out of a hundred appears to start reading spontaneously.

Consideration of the relation of oral language to reading leads us to point out necessary differences with certain linguistic pronouncements. An aura of scholarship now surrounds the news that "Nat is a fat cat" or that "Dan can fan a man" but similar over-simplifications reach back over a hundred years. Decoding the printed symbols is averred to be the only real concern at the strategic stage of beginning reading. We are told that oral rendition is all; meaning has no importance until later. Moreover, it is claimed that a child should learn to read easily within a year after he has learned to talk satisfactorily because learning to read is *easier*.[1] No neurological data are cited to buttress this statement. Since few children actually learn to read at this stage, in spite of varied cultural conditioning and home methods, the claim must remain as being one of hope rather than of fact.

Teachers concerned with the entire spectrum of children's growth are not likely to give up their respect for meaningful response to print from the very first days of taking down their dictated language in writing and helping them read what they have said. Many teachers intuitively use certain linguistic principles in recording their pupils' natural language patterns, editing as little as possible to retain the form and intent of what children have said but enough to meet the demands of the written language. These teachers will continue to encourage reading that makes sense and sounds real, thereby using the linguistic knowledge that Professor Lloyd says has been driven by use to the level of automaticity.[2] Strickland's investigation of children's language, a milestone in what must become a road toward norms for children's oral language, shows how strong is the bond between children's control of oral language with their silent and their oral reading.[3]

Knowledge of children's sentence patterns is emerging from the foregoing studies and from others. That children use a high proportion of subject-verb-object sentences is distinctly worth knowing. It is to be hoped, however, that errors of exaggerated vocabulary control now common to pre-primers will not be paralleled by excessive sentence control in forthcoming texts. If carried to extremes in reading material, this new knowledge can produce monotony as deadly as urging Sue to "Look, look, see see."

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[1] Charles C. Fries. *Linguistics and Reading*. New York: Holt, Rinehart and Winston, Inc., 1963, p. 112.

[2] Donald J. Lloyd. *Reading American English Sound Patterns*. Monograph No. 34, Evanston, Illinois: Row, Peterson and Company, 1961.

[3] Ruth G. Strickland. *The Language of Elementary School Children: Its Relation to the Language of Reading Textbooks and the Quality of Reading of Selected Children*. Volume 38, No. 4 (July 1962). School of Education, Indiana University, Bloomington, Indiana.

It is to be hoped that within the next decade we may reap some of the benefits from our present ferment in the study of language and of children's learning. We should look forward to (1) richer programs productively uniting facets of oral and written language, (2) more precise knowledge of growth increments in vocabulary, sentence patterns, (3) proof as to how much or how little elementary school children gain from knowledge *about* language, and (4) more satisfying use of language by children and their teachers, both as an instrument of utility and as a means of artistic personal expression.

## 2. Reading Skills or Language Skills?

ROSEMARY E. WAGNER

THERE HAS BEEN, over the years, a curious and persistent dichotomy between educators concerned with teaching children to speak and write and those whose concern was teaching children to read. The prodigal waste of motivation and reinforcement which resulted from this approach to reading instruction has finally been realized. Entire reading conferences, such as the Chicago 1963 Conference on "Reading and the Language Arts," are focused upon the interrelationship of language skills and the teaching implications of this interrelationship for reading instruction

I should like to consider, briefly, one aspect of this interrelationship, viz., to what extent the comprehension skills involved in reading are the same as, or different from, the comprehension skills children are called upon to use in listening and speaking situations.

Fries[1] remarks that he would be the last to disagree with the reading experts when they press for the cultivation of a whole array of techniques involved in understanding, thinking, reflecting, imagining, judging, evaluating, analyzing, reasoning, and in making social judgments. Nor would he disagree with their efforts to stimulate and strengthen these abilities through reading. He contends, however, that this *use* of *reading* does not constitute the *process* of *reading*. He notes that these abilities are and must be developed through uses of *language* and that indeed, they have all been developed by people unable to read.

We could easily become involved in a discussion of "process" versus "use" of reading. I think it more valuable to pursue further this matter of the power of language, oral or written, to stimulate the mind's activity and the mind's use of language to sort out thoughts and reactions and organize experiences.

From his earliest years the child's mind is stimulated by language as he responds to visual and auditory symbols of communication and strives both to understand and to be understood. However, unconsciously, he is looking for the main idea being presented to him as his mother gives a direction or explains something to him. He is seeking clues to meaning as he watches her face, follows her hand movements, listens to the intonation and stress of her speech. Having "gotten the message," he reacts; thinks through the situation; compares it to a previous experience; considers possible alternatives of response and selects one.

In the young child, these mental and linguistic activities are largely intuitive. As he matures, as his reservoir of experience deepens, his use of language for understanding his world and communicating with the people in it becomes conscious and refined. Day in and day out, in school and out of school, his mind is activated by the speech and behavior of those around him or who reach him through the mass media. He learns to listen purposefully for main ideas, to seek, relate, and evaluate supporting details. He is better able to read between the speaker's lines; to look for auditory and bodily clues to the "meaning behind the meaning." His mind accepts, questions, or rejects conclusions, using language as the medium of thought.

If we accept this description of a child's ongoing interaction with his environment, we are, in effect, agreeing that distinctions between listening comprehension and reading comprehension are either artificial or, at least, greatly exaggerated. The main distinction between them appears to lie in the use of written symbols in reading as against the auditory symbols of speech to stimulate mental activity and linguistic response. It follows, therefore, that the child has simply to use these same skills of oral language as he responds to the written symbols of reading material. Is it really as simple as all that or are there other factors at work that must be recognized in an effort to identify reading skills with language skills?

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[1] Charles C. Fries. *Linguistics and Reading*. New York: Holt, Rinehart and Winston, Inc., 1963.

Last fall, Sir James Pitman, designer of the Initial Teaching Alphabet, spoke to a conference in New York City. You may or may not be enthusiastic about I.T.A., but I think you will be interested in an observation he made in relation to this matter of oral language and reading skills. He referred to Piaget's work with young children and to his belief that the perception and analysis of auditory symbols are easier for children than the perception and analysis of visual symbols. Sir James then noted the clues to meaning, implications, relationships that are generally present in oral language situations but lacking in silent reading activities. He called these clues of bodily action, facial expression, voice intonation, etc., a "symbolism existing apart from language." He believes that adults frequently mistake a child's correct response in an oral language situation as resulting from language comprehension when, in fact, the words themselves conveyed the least part of the meaning.

He considered, also, the factor of "immediacy," in oral language situations versus the comparative remoteness of words on the printed page. Pitman believes that words heard by a child, immediately in relation to a personal situation—the child asking a question or making a request about a matter of concern to him, the adult responding—are more significant and meaningful than words he reads involving other people, times, and places.

This observation seems to suggest that though reading skills are indeed language skills, oral language is more than the words heard and responded to. The inability of the printed page to capture the human dynamism of face-to-face oral language communication must be reckoned with in any identification of language and reading skills.

## 3. Integrated or Interrelated?

ALTHEA BEERY

READING involves some elements that are common to all the language arts. An exploration of these should help determine the relation of reading to the total language program.

### Common Elements

1. Ideas are expressed in words. These words are put together, usually in sentences. There is a natural word order in English which young children acquire unconsciously as they listen to speech and learn to speak themselves.

2. Word meanings do not change with the mode of language used. However many meanings a given word may have, each meaning is essentially the same whether heard, spoken, read, or written.

3. The basic function of language is communication, which requires organization of ideas. Pauses in speech and modulation of voice are indicated on the printed page by capitalization, punctuation, paragraphing, and other devices, such as topic headings. The oral reader must convert these signals into natural oral speech.

4. All phases of language growth are related to the maturation of the child. More subordination and elaboration of ideas occur with the twelve-year-old child than with the beginner. Maturity is reflected in the increasingly involved sentences the older child can read and understand; similar differentiation occurs in the child's speech and writing. Harmonious development is preferable. The underprivileged child who remarked, "I can read better than I can talk," was aware of her poverty in oral language.

5. Language flourishes in a social setting. Educators take this for granted in listening and speaking; it deserves consideration also in reading and written expression.

6. For the young child, language is rooted in experience. Reading uses ab-

stract symbols, but with ability to read and sufficient previous contact with reality, reading itself is a form of experiencing.

7. The natural order in which language strands develop has usually been given as listening, speaking, reading, and finally writing. Educators agree with linguists that oral language is basic. In certain quarters at present, the sequence of reading before writing is being challenged, some authorities believing that both should be taught simultaneously. Whatever the order of initial presentation, the close interrelation of the four strands indicates that learning the skills of reading is enhanced when listening, discussing, and writing find their appropriate place in reading instruction. In my judgment, this position does not preclude regular periods for teaching reading.

### Questions to Ask Ourselves

Reading is so fundamental to continuous learning in a world of exploding knowledge, that lay persons, as well as professionals in other fields, are questioning the effectiveness of present methods and many panaceas are being offered. To take stock and improve results, persons responsible for reading must give thoughtful answers to the following questions.

1. How much oral language competence is pre-requisite to learning to read? To making normal progress?
2. How can concern for reading competence be shared by all who teach the child?
3. What plans are being made to acquaint teachers with new developments in reading—linguistics, experiments with young children, individualized reading, programed learning?
4. What advantages and disadvantages has each new approach or teaching procedure. If the results of research and local study lead to use, how can teachers make the most of the advantages and minimize the disadvantages?
5. Should beginning reading materials be limited to regularly formed words or regular symbols for sounds? Should the main reliance be placed on the writing of personal experiences, on basal reading materials, on individualized reading, or on some combination of these? How free should the individual teacher be to choose his own way of developing reading power?
6. When and how should children be introduced to such language conventions as usage, patterns in spelling, capitalization, and punctuation?

The comprehensive question we have been dealing with is: To what extent shall reading be interrelated or integrated with the other language arts? Doubtless, the answer will vary with the size of the system, the competence of the leadership team, the knowledgeability of the parents, and the abilities of the teaching staff. Today, study groups of teachers would seem to be as necessary in reading as in the new mathematics. The best program will result when the classroom teacher is treated as a professional person who has a frame of reference to give direction, but is relatively free to adapt materials and procedures in ways he feels will best meet the needs of his pupils.

## 4. Integrating the Language Arts: A Practical-Practicable Approach

JOSEPHINE B. WOLFE

THERE are two statements on which people concur. First, the citizenry who have difficulties using and interpreting language is handicapped. Second, inability to listen, to speak, to read, and/or to write cripples one's power to communicate effectively and efficiently. Yet, what kinds of practical know-how are we, the professionals, suggesting to improve the language proficiency of those we teach? If we were to examine this question thoughtfully, I am fearful that we would find that the suggestions being offered are neither wide nor varied. Why? Probably the most persistent reason is that many professionals prefer to rationalize their actions by claiming that students of yesteryear used language with greater proficiency than students today. These same professionals attribute the "so called" success to the vast amounts of stereotyped drill experienced in the mechanics of language. (Conversely, extremists today claim that students do not need structured systematic instruction.) Of course, you and I know that such thinking is fallacious. However, we must remember that the voices of such "rationalizers" are heard and that their thoughts are accepted by some of our professional and non-professional citizens. What, then, can be done?

### Integrating the Language Arts

*Practices: Common or Uncommon*

Before suggesting a practical and practicable approach for integrating the language arts, it is only prudent that we review current practices. Some of these shall be identified below. Whether you classify each as *common* or *uncommon* will depend upon your community, your school with its administrative-supervisory staff, your curriculum, and most of all YOU. The following are observable in a sufficient number of classrooms to be labeled practices in teaching "language arts."

1. Tradition affects *what is to be taught in language, when it is to be taught, and how it is to be taught.*
2. The content, grade placement, and sequence of teaching language skills are influenced by textbooks and teachers' manuals.
3. The content of language as well as curricular sequence is influenced by logical steps in the development of subject matter. This is influenced by the knowledge and perception of those who teach.
4. Test results are influencers of the content of language arts curriculum.
5. Integration of total language learnings with other areas of the curriculum is not prevalent.
6. Little articulation in the language arts exists from one level to another —from grade to grade, between the various phases of language, and between language skills and other daily activities.
7. There is little or no recognition or provision for individual differences among children when developing language, except in the area of reading.

*An Approach: Practical and Practicable*

Regardless of language practices, problems, and needs in a school or in a classroom, *a practical-practicable approach* should be the number one concern in developing a language program. Since teachers long for such help, I offer some of the "must" ingredients:

1. *Listening, speaking, reading,* and *writing* must be taught and integrated functionally in all language materials. Materials used and experiences presented must include those which motivate and interest children, as well as those which have meaning for them.
2. Language skills must be taught and integrated in the sequence in which language develops. Children must be taught to listen to a particular skill, to talk about it, to read about it, and finally to use it in writing.
3. Language skills must be learned and integrated sequentially and progressively.
4. Once a language skill has been introduced, it must be maintained and integrated in many ways and settings.
5. Continuous assessment is essential to language development and integration and is as vital to the teacher as it is to the children.
6. Provision for individual differences must be constantly observed as language learnings are integrated.
7. Children must be provided with meaningful independent practice and drill in integrating language skills.
8. Grammar, usage, and the mechanics of language must be emphasized in integrated experiences.
9. Children must be creative listeners, speakers, and readers before becoming creative writers.
10. Integrating the language arts must not be confined to a language period.

### Explore the New—Preserve the Old

Do you approach helping boys and girls integrate language learnings practically and practicably? Are you familiar with the many ways of helping them use language? Are you satisfied with your approach to integrating the language arts? These are queries to which only you can react. In doing so, be mindful (1) that sound practice is based on research and (2) that just as you will need to explore "the new," you will need to preserve "the old."

## B. JUNIOR HIGH SCHOOL

### 1. Reading Among the Language Arts

CHARLES M. BROWN

WHAT ATTITUDES, knowledge, and skills are required to operate in an act of communication, a desire to send a message or to receive one?

What is the best possible way for the junior high school pupil to increase his language skills?

Fascinating developments are occurring in the study of how children learn, and how they learn to learn which may well point the way. One example is Suchman's inquiry training (1).

The heart of Suchman's idea is the process by which the pupils learn the principles involved in a science lesson and the means by which they learn that process. A problem episode film involving a scientific principle is shown to the pupils. Thereupon the pupils are free to question the instructor whose role is to respond with a "yes" or "no." (Suchman now asks the instructor to play a somewhat more structuring role.) After many questions and much searching of reference material the principle is discovered. All this time, the tape recorder has preserved the process by which the students have arrived at the principle. Playing back the tape gives the pupils the opportunity to analyze and improve upon the process. Thus, they not only have discovered the principle but have increased their discovery skill for use in later discovery of other principles. They have learned a most valuable process.

A second example of this fascinating development is the work of Taba (2) in analyzing and developing teaching strategies that will facilitate the development of thought processes for the better formation of concepts and generalizations and for skill in applying those generalizations to explain new phenomena.

The key word in both studies is discovery—discovery of the key concepts and generalizations and discovery of ways of thinking. Can this method be applied in the area of the language arts?

It might be possible to lead children to state and to accept valid reasons for wanting to improve their penmanship. It might further be possible to help them to grade examples of good, bad, and indifferent penmanship. This might lead to an analysis of what makes the good product superior to the bad product. And it might even be possible to lead children to a discovery of what each of them needs to do in order to move toward the goal of improved handwriting.

In the area of composition a similar approach might be made. Some studies already indicate that there are much more profitable approaches to teaching composition skills than the formal study of grammar. Some of these approaches are somewhat similar to the direction indicated by Suchman and Taba. Comparative analyses of different quality compositions might permit the inductive generalization of principles of good composition. Such generalizations will be much more meaningful to the pupils, will be remembered longer, and will have greater transfer value.

Formal grammar was just mentioned with a negative connotation. While most research since the turn of the century has indicated that the formal study of grammar has little transfer value, does this mean that there is no value to a knowledge of the constants of our language? Perhaps if the structure of the language were approached from a discovery angle —with the pupils and teacher acting the roles of budding linguists, scientific students of the language—the long sought values might appear.

Other areas of the language arts, such as literary taste and appreciation and critical reading ability, might be developed the same way.

Two factors, however, must be considered. The first, very likely, is an order in which the steps should be taken. Elementary teachers of reading have long thought of this order in terms of reading readiness. Because this term has been misunderstood and misrepresented in some quarters, a new term might be in order. The term now proposed is *linguistic propaedeutics*. The word linguistic is included in the term to show that all of language is involved; propaedeutics — the preparatory study needed for later success in any field —gives the idea the appearance of learned dignity which it deserves.

The second factor returns us to our starting point. It is the interrelated nature of all language and the tremendous importance of reading as a tool in all learning. Surely the study of language must have a unity. The study of language is, as the study of anything complex, seriously limited without proficient reading skills.

The study of language thus envisioned becomes a benign rather than a vicious circle growing to encompass the world and all that's in it.

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1. Suchman, J. Richard. *The Elementary School Training Program in Scientific Inquiry*. Urbana: Research Board, University of Illinois, 1962.
2. Taba, Hilda, and Elzey, Freeman F., "Teaching Strategies and Thought Processes," *Teachers College Record*, 65 (March 1964), pp. 524-34.

## 2. Listening: The Neglected Dimension of the Reading Program

THOMAS G. DEVINE

NOW THAT the linguists have begun again to make listening a respectable component of the language arts program, it may be an opportune time to recall the fact that, as teachers of reading, we have never fully exploited the values of direct instruction in listening skills. To be sure, listening skills deserve to be taught as important skills in their own right. The fact that most of the information coming to our students comes in through the ears is justification enough for planned, sequential programs in listtening. However, a listening program may be justified on other grounds as well. Each of the familiar skills in reading has a counterpart in listening, and, there is reason to believe, our instruction in the listening skills reinforces our teaching of reading skills. The teaching of such listening skills as "recognizing a speaker's main ideas" and "identifying a speaker's transitions" seems to be directly related to the teaching of such reading skills as "recognizing a writer's main ideas" and "identifying transitional elements in an article." By teaching related reading and listening skills together, we not only affect an economy of teaching time and effort, we also may teach both kinds of skills more effectively.

One example of how certain related skills in listening and reading may be developed in conjunction can be seen in the following description of a ninth-grade program in critical listening-critical reading.

After selecting five critical listening-critical reading skills (recognizing bias, evaluating sources of information, distinguishing fact from opinion, recognizing inferences, and distinguishing between report and emotive language), a series of ten tape-recorded lessons designed to promote growth in these skills was prepared. In each of the twenty-minute lessons, students listened to political speeches, radio and television commercials, and discussions of controversial issues—all taped directly from radio or television. At the time these lessons were being prepared, a political campaign was being "waged" in the Boston area; many speeches and discussions were recorded and then edited so that only material pertinent to the lessons was included. To supplement such "real" material, dramatizations were made in which (1) a school committee heard arguments for and against the twelve-month school year, (2) an insurance examiner questioned witnesses to an automobile collision, (3) a high-school student discussed the merits of a particular used car with the dealer, a mechanic, and several friends.

In all ten lessons the "real" material and the dramatizations were introduced, explained, and discussed by a teacher-narrator who also gave three or four critical listening exercises at the end of each lesson. To insure that students responded as attentively as possible, a Response

Booklet was prepared and duplicated. In the Booklet students reacted to what they heard, commented upon certain items in the lessons, and gave their answers to the listening exercises. The entire series concluded with a teacher-made critical listening test, also on tape, which attempted to measure growth in the five skills taught in the lessons.

Each individual lesson was followed by a related lesson in critical reading. For example, after students had responded to the taped lesson in distinguishing fact from opinion, they examined duplicated passages from magazines and newspapers and were helped in distinguishing printed facts from printed opinions. After they had been introduced to the listening skill "recognizing a speaker's inferences," they were given practice in recognizing a writer's inferences.

The results of this particular classroom program seem to indicate that instruction in critical reading skills becomes more effective when attention is focused on the listening dimension of reading. Students seem to learn reading skills more efficiently when these skills are taught in conjunction with their corresponding listening skills. There is reason to believe that, as reading teachers, we might explore further the possibilities of exploiting reading's neglected dimension: listening.

## 3. Selecting Suitable Material for the Literature Program

EDWARD R. SIPAY

ONE OF the keys to any successful literature program is the selection of material which is not only worthwhile but also suitable for each child. Proper selection is particularly important at the junior high school level because it is usually during adolescence that interest in reading begins to wane and that a transition in literary appreciation takes place. Provided that the content and conduct of the program is not mandated by the central office, the teacher is faced with a number of decisions—the correctness of which will greatly influence the effectiveness of the literature program.

In a viable literature program, opportunities are presented for reading both classical and contemporary literature as part of a required reading program and/or under a program of guided self-selection. Each type of literature and program has its advantages and limitations. The teacher must decide: (1) if and when reading should be required; (2) how and when to guide students' selections of material to be read in class; (3) which children can profit from reading classics; and, (4) which contemporary literature and classics, if any, are suitable for a particular child or group.

Regardless of the type of literature or by whom it is chosen, the material is suitable only if the student is able to read *and* appreciate it. The teacher must begin with material which is appropriate for each child's levels of reading ability and literary appreciation, even if it be the comics, and guide him toward more rewarding fare. In order to do this, she must have information concerning both the child and the material.

Knowledge concerning the child's background, reading interests, and level of literary appreciation can be obtained from cumulative records, interest inventories, records of free readings, and through interviews and observations. And, a rough estimate of the student's level of reading ability is revealed by his standardized achievement test scores. Care should be exercised, however, in interpreting grade-placement scores, especially those at the lower end of the scale. For example, a score of 3.0 probably does not indicate that the child is capable of reading material written at the third-reader level.

A more accurate estimate of the student's ability to read a given piece of literature may be obtained by using a teacher-made test. Such an informal test can be constructed by choosing a 125-175 word selection which is typical of the material (use of a readability formula and knowledge of the content will allow an accurate estimate) and formulating five to eight comprehension questions. The test is administered by having the child read orally at sight from the book as the examiner records on a mimeographed copy of the selection the word perception errors and symptoms of difficulty which the testee manifests. When the reading is completed, the book is closed and the comprehension questions are asked and responded to orally. In most cases, the material will be suitable for instructional purposes if correct word pronunciation is at least ninety per cent (if the student is to read it "on his own," correct word pronunciation should approximate ninety-eight per cent), comprehension is sixty to seventy per cent or better, and few symptoms of reading difficulty are exhibited.

Information concerning the content and the reading and interest levels of a selection can be found in annotated book lists or obtained from librarians. It should be noted, however, that the manner in which they are determined may influence the suggested reading and interest levels. For example, three different readability formulas applied to the same selection may yield two or three different scores. And, the possibility of differing estimates increases when readability is based on expert opinion. It also should be apparent from the preceding comments that attempts to match grade-placement scores from tests with reading levels assigned to material may result in misjudgments.

In summary then, materials which are suitable for each student's levels of reading ability and literary appreciation must be selected if the literature program is to be effective. In order to select suitable material and to guide students' selections, the teacher must have information not only of each child's background, reading ability, and interests, and level of literary appreciation, but of the readability and interest levels of the material as well. Only then can she provide each child with suitable literature.

## 4. From the Complexity of Reading to the Clarity of Simple English

DAVID K. STEWART

### Articulation Needed

BETWEEN the complexity of beginning reading and the mastery of the English language, a pupil must learn many hundreds of language skills from a dozen or more teachers. Most of the communication skills are taught first by elementary reading teachers. The remainder are taught by English teachers in the junior and senior high schools. Reading is a complex subject. English is clear and simple only to those who have mastered the entire complicated range of language skills. The intricacies of our language can be illustrated by even a cursory examination of the skills patterns that must be mastered by the effective reader. The phonemes and morphemes of grade one pave the way to the formal grammar taught in high school English.

Linguistic competence presupposes the ability to read, write, listen, and speak competently. Each of these four abilities requires a complex of skills. Each is important, but one must be given priority because of its content. This priority goes to reading. Through reading, students acquire seventy-five per cent of their learning in science, social studies, language, and in mathematics courses. General scholastic accomplishment seldom exceeds reading level. Through the developmental reading program, pupils learn the study skills essential to mastery of each of the content subjects.

A modern language program must provide the full range of skills—phonetic analysis, structural analysis, interpretation and comprehension skills, location skills, dictionary usage, and considerable emphasis on skills of critical thinking.

### The Change Is Coming

It would be worth the time of any teacher to compare a modern primary basal reading manual with a secondary English text. Such a comparison would indicate that word structure and function, sentence structure and word meanings are taught, by different methods, for different reasons, by teachers of reading and English. A change is taking place, however, in language teaching methods. The change has been a gradual one in elementary reading, but English teachers will have less time to meet the demands of current research. Colleges of education have the same responsibility to teachers of English that they have ably met in the case of the reading teacher. The eighteenth century prescriptive approach to what language "ought to be" is giving way to modern descriptive analysis of what language "is" and "does." Paralleling, but preceding, this change in English was a multitude of changes in elementary reading methods. The changes begun in the Forties were mandated by recognition of the essentiality of reading competence to the study skills. The reciprocal relationship of reading competence to achievement in all fields is recognized.

**From Reading Skills to Study Habits**

The modern reading text provides a sequential skills pattern that leads the learner and the teacher directly into the secondary schools study skills requirements. It is with those skills that the teacher of reading and of English should be primarily concerned. Because of the nature of basal reading materials, the elementary teacher has been directing efforts to this end, but the English program, adhering to the pattern of the old Latin grammar, has not been able to do so. The English program of the past several decades in most elementary and secondary schools has consumed teacher and pupil time in drill and practice on little more than the mechanical structure of our language. The obvious need for articulation of the English program with other curricular fields has been largely ignored. The consequent loss in pupil achievement can be measured by the increasing dropout rate and other evidence of scholastic disorientation.

**Skill Strand Articulation**

What is to be done? We need an extension upward into the secondary school of practices currently an integral part of elementary reading programs. We need a planned and purposeful study skills program, a program of skills beginning in the kindergarten, a part of every course of study, extending across each subject area and upward through every elementary and secondary grade level. The skills program should include four "strands" of skills.

*Skill Strand 1*—Sound-Symbol Recognition

Linguists describe the sound system of the language as the most consistent element of its structure. Sound-symbol recognition can and should be taught as a sequential pattern of learnings extending into every subject field and through and beyond the elementary school.

*Skill Strand 2*—Structural Patterns

The language of the modern curriculum and of society needs to be described and taught. Grammatical form is important and it must not be isolated into a rigid body of mechanical elements. Structural patterns of language must be taught in context if learning is to have purpose.

*Skill Strand 3*—Conceptualization

Sound-symbol recognition and structural analysis skills are merely prerequisite to the real purpose of communication, the conveyance of meaning. Neither symbol nor structure can give meaning to the learner. Correct concepts, based on understanding of word and phrase meanings, produce comprehension.

*Skill Strand 4*—Implementation

For the reading and English teachers who accept responsibility for identifying and teaching the first three skill strands there remains the necessity to implement these skills through the length and breadth of the curriculum. Implementation is possible, it is imperative.

Scholastic success is possible only for those learners who can communicate competently. The reading and English teachers cannot do the entire job but it is necessary that they, as specialists, take the major responsibility for identifying and describing the language skill strands in each content area. *"Every teacher a reading teacher"* was no more than a slogan. It hasn't worked. The skill strand approach, built into every lesson plan, can provide a sequential learning pattern for continuity and purpose in the school program of studies. Here is a way of identifying responsibility for language skills that will help every teacher be a teacher of language skills.

# C. SENIOR HIGH SCHOOL

## 1. Learning to Write Through Reading Literature

ARNO JEWETT

ALTHOUGH research has not yet provided valid answers to the problem, there are at least three good arguments for using literature as a medium for teaching pupils to write. Since eminent literature is the treasury of man's thoughts and wisdom and the record of mankind's failures and accomplishments, it contains ideas worth thinking and writing about.

Teachers who have tried to teach pupils to write know that one of the greatest weaknesses in student compositions is lack of substance—of solid content. The common classroom refrain to most composition assignments on topics such as "My Most Embarrassing Moment" or "My Favorite Pet," is, "I can't think of anything to say!" And even those who can think of something are unlikely to have anything worth saying on this type of topic. Ideas from literature, carefully weighed and considered by pupils, can provide solid content for composition work.

Several of the curriculum study centers established as part of Project English are teaching units of rhetoric and composition which are closely related to literature.

In the University of Nebraska Curriculum Center the composition and language activities are expected to grow out of the pupils' experiences with literature. Learning in all three areas is to be fostered simultaneously. The Nebraska teachers believe that pupils can best understand the nature and possibilities of the English language by being exposed to literature of superior quality over a long period of time. Under the leadership of Paul Olson and Frank Rice, the Nebraska program in composition tries to give students:

(1) a sense of the expressive possibilities of the sound of language;
(2) a capacity to manipulate syntactic patterns and to choose the "most desirable" syntactic pattern;
(3) a capacity to manipulate simple rhetorical devices (metaphor, simile, etc.); and
(4) a capacity to write in fictional modes analogous to those studied in literature readings and to add more analytic modes of writing to these.

For example, teachers in secondary schools following the program developed at the University of Nebraska might ask tenth graders who have read Stephen Crane's "The Open Boat" to write a paragraph developing the following idea: "It would be difficult to describe the subtle brotherhood of man that was here established on the seas. . . . No one mentioned it. But it dwelt in the boat, and each man felt it warm him." Students would then be asked to find another example of imposed brotherhood from real life or history or literature and to write a theme of comparison and contrast presenting their own reflections and conclusions.

In its *End-of-Year Examinations in English for College-Bound Students, Grades 9-12,* the Commission on English of the College Entrance Examination Board has published a series of essay questions based on literary works. These questions are broad enough to require the student to recall one or more significant literary works which he has read and to make a critical analysis or estimate of point of view, characterization, or theme. In grade 12, for example, students are asked to consider this statement: "The great writers of the past excel even the best writers of our own time in their treatment of such problems as the role of undeserved suffering in human experience; the relationship between power and moral responsibility; the conflict between individuality and conformity; man's search for the truth about himself."

Then they are given one hour in which to write a carefully planned composition in which they agree or disagree with one of the problems in the above statement by discussing two single literary works: one by "a great of the past" (pre-twentieth century) and the other by one of the best writers of our own time. Of course, the first time that a student who is accustomed to true-false, multiple-choice, and completion examinations faces this type of question, he is likely to look and act blank, but with some help from his teacher on how to read in depth and to make critical judgments, he may acquire gradually the habit of looking for major insights and values in literature and of comparing and contrasting the pieces of poetry, fiction, and non-fiction which he reads. Literature abounds with choice lines which are excellent for composition topics.

In addition to strengthening the content of a pupil's composition, the study of literature should under certain conditions improve his style of writing. This is my second argument. As you know, several famous writers including Ben Franklin, Robert Louis Stevenson, and W. Somerset Maugham have attributed at least some of their stylistic accomplishments to wide reading of excellent authors and the influence of various styles of writing.

Today there seems to be a renewed interest in using choice pieces of description in both prose and poetry as models for student composition. The directors of the curriculum study center in English at Northwestern University last summer examined over a thousand compositions written by high school students and concluded that the most serious weakness pervading the themes was a flatness of diction, a lack of choice imagery and metaphor, a paucity of specific, concrete, sensory details. One method followed by high school teachers in the Northwestern center was to emphasize the close observation by pupils of objects in their immediate environment. Teachers collected examples from standard prose works, such as the section called "I Observe" in Chapter II of *David Copperfield*.

A useful type of prose model is a description of an ordinary occurrence—one which students observe frequently in an off-handed way. One example, which is from George R. Stewart's novel *Storm*, describes a sudden rain in San Francisco. To make students conscious of style, the teacher would call attention to the descriptive nouns and verbs, the alliteration, the onomatopoetic language, the simple, fresh diction, and balanced sentences in the following two paragraphs:

> "Water spattered upon the sidewalks in rain-drops. Water ran in the gutters; it gurgled through the gratings of the storm drains; it dropped from awnings and cornices; it cascaded from broken drain-pipes.
>
> "Sleek wet asphalt reflected the glow of neon lights in long unreal lines of pink and blue. Drivers of cars leaned forward nervously, peering through the windshield wipers. The professionals—truck- and taxi-men—sped along as nonchalantly as ever; their impudent wheels threw water from the puddles; pedestrians drew back, fearful or angry. Street-cars came along stolidly; from beneath their wheels little sprays of water flew sideways."

There are many other qualities of good style that could be discussed here: the use of figurative language, the contrast between the nonchalant taxi-men and the angry pedestrians, and the comparison between the water thrown by the cabs and trucks and that sprayed by the wheels of the street car. Choice literature, of course, is replete with similar examples of effective prose style which students should note and adapt to their own writing purposes.

The importance of making students conscious of the styles used by authors for different purposes and of experimenting with these styles has been pointed out by Jerome Bruner in his oft-quoted volume *The Process of Education.* Dr. Bruner states: "One may try to give the high school student a sense of styles by having him read contrasting authors, yet final insight into style may come only when the student himself tries his hand at writing in different styles."[1]

My third argument for relating composition work to literary study is that a study of choice diction, figurative language, symbolism, syntax, rhythm, point of view, irony, contrast, and mood in both areas should lead students to discriminate between shoddy writing and superior composition. In other words, this type of study should lead students to recognize and appreciate the best literature available to them.

What scientific evidence do we have to support these three arguments? The answer is "Very little." Frank Heys, Jr. has reported (*The English Journal,* May 1962) the results of a study in which a writing class wrote a theme a week and a

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[1] Jerome S. Bruner, *The Process of Education.* Cambridge: Harvard University Press, 1961, p. 29-30.

"reading" class wrote a theme every three weeks but spent a class-period a week reading books they had selected. Mr. Heys concluded that "For many students reading is a positive influence on writing ability." He added that "We need to find out how much reading, and what kind, will produce the optimum effect on ability to write."

In other words carefully controlled research is needed to discover whether the three arguments which I have advanced in this paper are valid or not.

# SEQUENCE VI USES OF MULTI-MEDIA IN READING INSTRUCTION

## A. ELEMENTARY SCHOOL

### 1. Television as an Instructional Tool

CLARE B. ROUTLEY

SOME eleven million American children were enrolled in television classrooms last year, an increase of three million over the previous year. Seventy-nine per cent of the students were in grades kindergarten through 8 and they were regular viewers of television programs as part of their classroom routine. Television has been called the most powerful tool of education since the printing press and now more than thirty countries are using it as an aid in teaching, some of them for teaching reading. The competent educator today entertains no doubts of the value of television as an instructional tool. He knows that since its creation, television has been the young child's greatest interest and an active television program will hold his attention as no other medium will do. We know that children in primary grades still watch television 28 hours per week; those in the middle grades average 21 hours weekly and high school students only slightly less. Therefore, no educator in this decade can afford to overlook the potential of television as a medium of instruction in the basic subject of reading. To a minor extent it may relieve the teacher shortage that is common in all nations, but there is no doubt about its value to improve the quality of instruction.

Television should take to the school the best teaching techniques that the television studio can find. Certainly, a highly competent teacher on television can be much more effective in stimulating learning than a regular teacher who borders on mediocrity. For this reason, television teachers should be the best in the nation. A student who had observed a competent teacher conduct a lesson in reading, was heard to remark, "If I had a teacher like her, I would be a much better reader than I am." Such a remark might not be popular, of course, but good television programs bring pressure on the classroom teacher to excel. For this reason, the studio teacher should be a first-rate model of perfection and then the regular teacher, if she is so inclined, may add to her professional competency every time she observes a lesson.

Unfortunately, many educational authorities are apparently unaware of the value of television as a medium to teach reading or to improve instruction in the subject. If we regard reading as the basic subject of the curriculum and the one in which competency is demanded, if formal education is to be built, one would think that the first lessons to be given through the powerful medium of television would be in reading. However, there are many school authorities, superintendents, state and provincial departments of education with regular programs in science, mathematics, and social studies, but none in reading instruction at any grade level. Why are programs in reading the last to be organized in some areas? If reading is the basis of education, why are some school systems still patterning their telecasts on enrichment? Why do some teachers still regard television programs with mixed feelings ranging from excuses such as too many interruptions to that of causing havoc with their school programs? The answer to some of these questions is the lack of involvement of the teachers at every stage of television programing. This is not a complaint in Canada where there is much teacher involvement at pro-

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[1] Professor Italo Neri, *Wide Horizons for All Ages.* The Times Educational Supplement, February 22, 1963, p. 347.

vincial and national levels.

A study of educational television programs in North America and Europe during the past year reveals that programs in reading instruction are not as common as programs in science, social studies, and mathematics. In fact, a common response to a questionnaire inquiring about the use of television in reading was, "At the present time there is no school system in this area which uses television in the teaching of reading, but we hope to correct the situation shortly."

There are, however, many excellent programs in reading—in reading readiness for teachers and parents; for the primary and the intermediate grades; for junior and senior high school classes; and for college students and other adults.

There are more television programs in reading for adults than for any other age level. There are programs designed to teach adult illiterates to read, for the better-than-average readers who desire to become superior readers; and for those who wish to improve their speed and comprehension. STREAMLINED READING I AND II, produced by WKNO-TV, Memphis, Tennessee, adheres to the principles of adult psychology and is based on the teaching methods of Dr. F. C. Laubach. In a country like Canada where biculturalism and bilingualism are much in the limelight at present, EN FRANCE by television teaches thousands yearly to become bilingual. Some 234 persons participate in this series in which you meet people from France. One learns French from a French taxi-driver, a French waiter, secretary, gendarme, salesman and even a French fortune teller.

Of the many programs for adults reported this year to the Television Committee, none was more impressive than *NON E MAI TROPPI TARDI* (IT'S NEVER TOO LATE), reported by the Ministry of Public Instruction in Rome. This program shows that Italy is a leader in educational television. In 1962, almost one-third of all Italian television programs were devoted to school broadcasting. IT'S NEVER TOO LATE was designed to teach reading to those of all ages who had to leave school early to earn a few *lire* to help balance the family budget. Some 5500 "reading centers" have been set up throughout Italy where adults gather to learn to read. At each center a competent teacher is present. People of all ages come to these centers to learn to read by television. Once the broadcast is over the teacher follows it up with exercises in reading and writing. Each year more than 30,000 take the final examinations and more than 70 per cent pass, which means that they have learned to read and write by means of television. Of this program, Professor Italo Neri says, "In the field of reading, the magic power of television can exert its full impact and so restore hope and confidence to thousands of people who, rescued from the bondage of illiteracy, are brought back into society."[1]

"Seven hundred million adults in the world are illiterates and the number is increasing at the rate of 20-25 million a year."[2] These are the figures released as late as March 23, 1964 by UNESCO from its Paris Office. It would appear that we are not holding our own in the great struggle with illiteracy. It was some fifteen years ago that the United Nations adopted the Universal Declaration of Human Rights. Article 26 of the Declaration reads, "Everyone has the right to education." Now some 15 years later after the adoption of the Declaration there are hundreds of millions who cannot read the sentence in which the UN acknowledged their sacred right.

It is gratifying to read that plans are being made to make literate about 330 million between the ages of 15 and 50 years within the next ten years. It is the medium of television to which the masses must look as their main hope if they are ever to learn to read. We know that the potential of television as an instructional medium is unlimited and yet unexplored. We are told that one telecast beamed from a satellite will be able to take instruction to an entire nation and perhaps a group of nations. One teacher, and let us hope she is the best to be found, will be able to teach a reading lesson to one billion people. Furthermore, we are told that such system of communication satellites will be in full-scale operation in 10-15 years.

Perhaps, then, we in the developed countries should take stock of our reading programs by television. We shall need some central evaluation service to see that only the best are produced and that they are preserved for posterity. We must be certain that television programs in reading are designed by masters of reading techniques and produced by the nation's most competent educators. It is the birthright of every child to sit at the feet of a great teacher. For some children, their great teacher may be the one observed on television.

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[2] Press Release, No. 2474, UNESCO. Place de Fontenoy, Paris 7e, March 23, 1964.

## 2. Teacher-Pupil Rapport on Television

SISTER MARIAM, O.P.

"EDUCATIONAL television is something of a paradox. Part of the greatest medium ever developed, it sells nothing. Part of a medium with unequaled ability to attract people, it programs for minority audiences. Part of a highly expensive medium which needs the support of more than a billion dollars of advertising in money annually, it gets no advertising support and exists on Spartan budgets and a rickety financial structure of gifts and school money. Part of a great entertainment medium, it invites its audiences to come not for entertainment, but rather for work. It invites them, not to relax, but rather to stretch their minds in order to capture new ideas and information."[1]

Part of this paradox is in the nature of television itself, which is a great entertainment device, and is also a great educational medium. Some of the people who first experimented with it were educators. Experimental telecasts were made at the University of Iowa as early as 1932. But it was the entertainment side that drew audiences and rapport. We note that there were 200 commercial stations, supported by advertising, before the first non-commercial educational station went on the air. The very fact that it went on the air at all was a tribute to the vision of a small group of educators who resolved that the teaching qualities of television should not be lost sight of in the great success of its entertainment qualities. For the next few minutes we are going to look at educational television, and at children's use of it. We are going to ask the question, "What part does television play in the life of a child?" This seems to be a better way to ask the familiar question: "What effect does television have on children?"

In one sense television doesn't have an effect on children. It is a great pleasure source of experience, a supermarket of gratifications to which the child goes for what he wants. It is a rewarder of drives, a reinforcer of responses, a teacher of facts and skills, and a source of information. If what television offers is important, more important is the set of needs and expectations which the child brings to television.

The dynamics of the relationship between the child and television in not a simple relationship. But we must be concerned with it. The most heard statements about television are often only half-truths: for example, that brighter children see less (or more) television; television is good (or bad) for children; television builds (or reduces) aggression, etc.

The forces that enter into the dynamics of a child with television are more complicated than that. I think of four sets of forces that compose this relationship: the child's intelligence, the class norms within which the child functions, his family and his peer group.

What a child is, before he goes to television, what relations he can build up within his family and his peer group, what needs he takes to the television set, are the chief components of television's effect on him. But there is more than this. There is interaction between the need he brings to television and the reinforcement that the program provides for him.

For this reason, what is available on television is important in terms of all children. The selective reinforcement the child gets from 10-25 hours of televiewing a week must have something to do with what he knows and what he does. The television teacher must thoroughly understand the four dynamic relationships mentioned above and plan the program with this in mind. If a seventh grade child is going to devote his waking hours to a medium that is an unequaled teacher of facts and skills, then that medium will have an influence on the developing picture of his environment.

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[1] Wilbur Schramm et al. *The People Look at Educational Television*. California: Stanford University Press, 1963.

If there is sufficient opportunity on television to challenge the bright child, if there are programs to satisfy the kind of norms that encourage the seeking of information and the gratifications of the fine arts, then we are giving children the kind of relationships with television that are noble and which provide a means of self-betterment.

## 3. The Audio-Visual Approach in Reading

ELIZABETH ALENICK

I SHOULD very much like to acquaint you with an interesting study in which we have been involved during the past three years—The Audio-Visual Approach in Reading.

In the spring of 1961, the study was initiated in a first-grade class in each of three schools located in socially-disadvantaged neighborhoods and then extended in September, 1963 to 11 schools involving 15 teachers of 15 classes in grades 1 and 2. We do not plan to extend the study beyond the second grade.

I. WHAT IS THE AUDIO-VISUAL APPROACH IN READING?

The audio-visual approach in reading utilizes selected filmstrips and recordings to improve the reading program in the primary grades.

II. WHAT ARE THE OBJECTIVES OF THIS PROGRAM?

A. To demonstrate the effectiveness in developing listening and speaking skills as well as concepts basic to readiness.

B. To demonstrate the effectiveness of selected filmstrips and recordings in improving the level of reading achievement in the primary grades.

C. To demonstrate the effectiveness of using audio-visual materials and techniques in large-group instruction and in building independent work habits.

D. To create an intensive motivation for learning to read in the primary grades through the use of correlated audio-visual and printed materials.

Our teachers spend three to six weeks in reading stories to the children, having the children view the pictures in the stories through filmstrips, encouraging children to retell the story as each frame is shown, encouraging children to talk about details in the picture as the frames are shown, explaining concepts with which the children are unfamiliar, *listening* to likenesses and differences in beginning sounds of words used in conversation or in the experience chart, *listening* to recordings and enjoying the story and the background music, *seeing* the story written on the chalkboard or experience chart, seeing the stories in their own words written in a storybook which may be duplicated for all to own and which may be taken home, *sharing* the class storybook, *operating independently* the phonograph, the filmstrip machine, the desk viewer, and many, many more learnings.

All this listening, speaking, learning, we believe, helps to bridge the gap and to give children in disadvantaged areas the compensatory exposure to material with which the children in more favored areas are equipped. We know that children so equipped have been helped to catch up; the slack, in some measure, has been taken up and these children have been given the spark of positive motivation to enable them to accept the highly abstract reading process. There can be much learning without reading which can motivate children to *want to learn to read*.

The children, after weeks spent on our audio-visual approach, *can* read the pre-primers and can go right into the primer of the basal reading series being used in the school. Our children have been exposed to all pre-primer words experientially and have accepted them and made them their own.

III. WHAT MATERIALS AND EQUIPMENT ARE USED?

A. Materials provided for project teacher:

1. Basal readers
2. Filmstrips related to these basal readers; i.e., stories, reading readiness and phonics filmstrips emphasizing word-attack skills
3. Workbooks for these basal readers
4. Rebus cards, word cards, phrase and sentence cards and large pictures correlated with the basal readers
5. Picture dictionaries and other dictionaries
6. Trade books
7. Filmstrips correlated with trade

books
    8. Filmstrips related to social studies content
    9. Pocket charts
  B. Equipment
    1. Phonographs with adaptors
    2. Earphones
    3. Filmstrip projectors (for class use)
    4. Overhead projectors
    5. Filmstrip Desk Viewers (for individual use)
    6. Filmstrip Desk Viewers with desk-size screen (for group use)
    7. Tape recorders

### IV. HOW ARE THESE MATERIALS UTILIZED WITHIN THE CLASSROOM?

The teacher may use a varied approach:

- A. The record and the filmstrip of a story are presented to the entire class. Class discussion and interpretation follow.
- B. The audio-visual presentation of material is utilized by the teacher to increase oral language ability, concepts, and sight vocabulary.
- C. The filmstrips in conjunction with the basal reader in the series, are used to introduce and reinforce phonics and word-attack skills and to present the new vocabulary.
- D. Comprehension skills are developed through questions by the teacher when the pictures and text are presented on the screen.
- E. Tape recorders are used by the Non-English Speaking Coordinator when necessary, to tape the stories in Spanish, teach the concepts in Spanish, and then translate them into English
- F. The trade books are always in the classroom library to be read to the children or to be handled by the children.

### V. WHAT PROVISIONS ARE MADE FOR A CONTINUOUS EVALUATION OF THIS PROGRAM?

- A. Class Log.
- B. Formal Evaluation
  1. The New York Reading Readiness Test (the first week in October).
  2. The basal reader readiness test (the first week in October), if this test accompanies the series.
  3. The basal reader achievement reading test (the end of the school year).
- C. Informal Evaluation
  1. The teacher, through daily observation, continuously evaluates and diagnoses her children's reading growth and reading needs.
  2. The Informal Textbook Test is administered to each child at the end of the school year.
- D. Profile Sheet—Teachers Keep a Class Profile Sheet with data concerning the physical, emotional, social and intellectual characteristics of each child.
- E. Meetings — All teachers, supervisors, reading consultants and related personnel meet regularly to evaluate the progress made.
- F. Intervisitation—A small part of the regular conference is devoted to visiting the project teacher's room and observing the physical organization of her room and the materials she develops.
- G. Supervision — A supervisor in each school is designated to direct the program in his school.
- H. Other personnel, such as Reading Consultants, Field Consultants in Early Childhood, Supervisors of the Bureau of Audio-Visual Instruction, and Corrective Reading Teachers give consultant service.

### VI. WHAT SUGGESTIONS ARE MADE FOR CREATIVITY IN THIS PROGRAM?

- A. Dramatize the story in the filmstrips.
- B. Have children retell the story in their own words as each frame is shown.
- C. Have children dictate stories about the filmstrips.
- D. Make a book of your children's original stories and drawings. This book can be added to the class library.
- E. Occasionally show the textfilms on the chalkboard.
- F. Art work can be related to the filmstrips.
- G. Compose songs related to the filmstrip story using original tunes.

### VII. WHAT PITFALLS SHOULD BE AVOIDED AND WHAT SUGGESTIONS CAN BE FOLLOWED IN USING THIS PROGRAM?

- A. Avoid introducing every new story and its accompanying filmstrip in the same way.
- B. Avoid overexposure to each of the materials; i.e., the showing of filmstrips daily.
- C. Avoid routinization in follow-up activities; i.e., constantly writing experience charts or "stories" about the filmstrips after the viewing of them.
- D. Avoid using one audio-visual procedure, exclusively, for the development of certain lessons.
- E. Avoid the teaching of too many lessons based on the same filmstrip or recordings.
- F. Avoid the temptation of showing more frames, in a textfilm, than the children's attention span will tolerate.
- G. Avoid allowing the children to remain inactive while instructional filmstrips are being shown.
- H. Make certain machines, shades, etc., operate properly before actual classroom use.
- I. Use some filmstrip more than once.
- J. Plan carefully. (Make the material fit the lessons, rather than the lesson

fit the material.)

K. Be flexible.

L. Follow-up activities after the showing of a filmstrip must provide for individual differences among children in the class.

M. Establish goals in advance and utilize materials to fulfill these goals.

VIII. WHAT PROVISIONS ARE MADE FOR THE SLOW CHILDREN?

A. Individualization of instruction.

B. Small-group instruction in word-attack skills.

C. Individual help by the Corrective Reading Teacher.

D. Individual help by student teachers.

The Audio-Visual Approach in Reading is a self-motivating program making use of good teaching techniques. The filmstrips complement, rather than substitute, the reading program. Often beginning readers become so interested that they feel encouraged to read the books for themselves, and so they discover that books can be so much fun

We firmly believe this program gives: (1) an initial, positive impetus to reading, (2) a positive motivation to reading from the printed page, and (3) a third dimension to the reading process.

## 4. Programed Reading in the Elementary Grades

HELEN M. POPP

THIS PAPER gives an abridged presentation of additional information on four of the programs in elementary reading reported by Fry (1964).

*Dialog 1* consists of 124 lessons which introduce 62 phonic elements. Taped aural stimuli and workbooks which present pictures and written text are used and the students are required to produce written and oral responses which are verified. No validation data is presently available.

An Honor Teaching Machine program of homonyms uses prompts which are mostly mnemonic, but also includes the deletion of words in rhymes. The program is presented in a small machine and the student responds by pressing one of four buttons on the face of the machine. If he has made a correct choice, the paper advances. It is also often advanced after an incorrect choice and the student is expected to read that he was incorrect. No record is made of responses which is unfortunate as one can advance the paper by barely touching the correct button and then depressing and holding an incorrect button. An elimination of this characteristic of the machine and the development of better programs would add greatly to its usefulness for reading teachers.

*The First Steps in Reading*, a multiple choice program, requires the student to make his selection and then advance the paper in the Min Max machine to expose the correct choice found directly under each item. Visual discrimination of large capital letters is followed by instruction on **AT** and **AN**; **H** and **UG**; **P, S, F, M, IN**, and **ING**, and various combinations of all single letters as initial consonants in combination with all endings taught; 24 "picturable" words; structure words such as **the** and **and**; also **up, to, on, after, is, was, run, too, are, were**, more nouns, and plurals; and lastly **had** and **has**. Many of the words taught show similarities in beginning consonants and word endings. A post test includes an isolated word list and nonsense sentences.

The program has not yet been used in schools, but some data have suggested that the program takes about 13 hours to complete and that students show an increase in word knowledge of about 70 per cent from pre- to post test.

*Programed Reading* approaches initial reading instruction with a detailed teacher's guide to classroom instruction. The pupils' programed primers are introduced when students have learned to recognize and print the letters of the alphabet and have learned the sounds of five letters. One written response per page is required and the confirmation, found in the margin to the left of each item, is covered by the child until after he has responded to the item itself. Thus the prerequisites for the reading program are taught: **a, f, m, n, p, t, th**, and **I**; the words **yes** and **no**; a discrimination between the words **ant, man, mat**; and the sentence, **I am an ant.** The reading material progresses through 25 consonants, 17 vowel sounds, 7 suffixes, and 11 sight words. In all but the sight words, the letters have constant sound values. The vowel letters are given their long values and various spellings are introduced systematically in the second series. Included are double vowels, vowel combinations, soft values for g and c, suffixes, silent consonants, and other irregular subclasses.

The publisher's validation data indicate that first graders trained with this program achieved a grade level of 3.8 on standardized reading achievement tests; that there were no "non-readers"; that the error rate throughout the program was about 3 per cent; and that the post test error rate averaged 5 per cent. No indication as to how much or what kind of teaching took place in addition to the program is given.

If you face the practical problem of evaluating the available programs, an article by James Holland (*Teachers College Record*, 1961, p. 56) will be helpful and a request for validation data from the publishers is in order. Look at each program being considered and first decide whether or not the final test is representative of exactly that which you want your students to learn. If so, try the program out on a small sample of children. This is not to suggest a controlled study, but rather a trial for your own benefit to determine where the program is the most effective, where it is the least effective, and whether or not it does what it purports to do. A report to the publishers on the results of instruction will provide them with a valid means of improving their programs and should provide you with a better understanding of the components of reading instruction.

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## B. JUNIOR HIGH SCHOOL

### 1. New Perspectives on the Multi-Media and the Junior High Reading Program

ROBERT M. WILSON

HAVING followed a basal program for six years during the elementary grades, the junior high school student is in an ideal situation to make maximal use of a multi-media approach. His elementary training included a well structured exposure to the various reading skills. Now, as he arrives in the junior high school, he can make the best use of a program which is highly flexible to meet his wide range of skills and interests.

A well developed multi-media program has the flexibility which is called for in this situation. A look at two such programs emphasizes: (1) flexibility; (2) individual differences; (3) student interests; and (4) periodic evaluation.

The first program is characterized by permitting the student to work one-half of his time in any area of his choice, and the other half under the direction of the reading teacher. Each student will be expected to choose an area in which he feels he can use his time most profitably. His decision will be guided by his scores on a pre-test evaluation, the reading teacher's guidance and his own personal inclinations. By selecting an area for emphasis in this manner the motivation which many junior high school students need so desperately is provided before the instruction actually starts. As the student begins to work in his chosen area, the teacher assumes a guidance and tutoring role which passes the initiative to the student. Allowing the student this freedom provides an individualized approach to reading in the junior high school which can be adjusted to best meet the needs and interests of these students. With the time remaining, the teacher may conduct a basal reading program, book discussions, project presentations, general vocabulary drills, etc.

A problem that occurs in this type of program is that the student may choose an area in which his needs are not the greatest. He should be permitted to work in this area to develop and refine his strength. The teacher, however, may want to set a nine-week limit on any one area. At this time all students would be asked to re-evaluate and possibly change their emphasis to an area of more need.

Another way of making use of the multi-media approach in the junior high school, is to have a carefully coordinated and sequential program in the seventh, eighth, and ninth grades. The seventh grade, for example, would be a time for the review of those basic reading skills which need to be strengthened and refined. In eighth grade the emphasis would be on applying reading skills to content areas, while work in the ninth grade would be in developing an interest in reading.

Cooperative efforts are essential in this type of program to assure the student's skill sequences. It should be noted that these areas cannot be completely isolated, and that some of each area will appear at each grade level. The reading teacher, however, can concentrate her efforts toward one basic goal during each year.

Both of these situations call for multimedia approaches and a flexible classroom situation. Both are geared to meet the needs of the junior high student.

## 2. TV Lessons to Stimulate Interest in Reading

MARTHA A. GABLE

IN THE Philadelphia Public Schools TV is used to stimulate reading, to acquaint pupils with interesting books and how to secure them, to arouse interest in the school and public libraries. This is done through a series of programs, requested by English teachers at the junior high school level to supplement classroom presentations of literature.

The series entitled "Books in Action" presents dramatized excerpts from books, plays, and stories on the reading list. A panel of four pupils with their teacher raises questions on plot and character development, analysis of the author's meaning and objectives, and individual reaction to the story. This is conducted in an open-end format to help viewing teachers and classes to continue the discussion after the telecast.

A synopsis of the action to be presented, suggested questions, vocabulary, and information on the book—author, publisher, where available—are sent to schools two weeks before each program.

Another program at the sixth grade level, presented in cooperation with the Pedagogical Library of the Philadelphia Public Schools and the Free Library of Philadelphia, acquaints pupils with the great variety of books available. The format varies, with the telling of the story, a visit with the author (when he or she is available), a visit with the illustrator when this is significant and possible. New books are partcularly featured to alert both pupils and teachers. This series is entitled "TV Bookshelf" and is the third program per week in a sixth grade series of language arts in which the skills of language are presented. Parts of speech, grammar, punctuation, vocabulary, use of dictionary are included.

This program permits time for pupils to fill in proper word, punctuation, or selection of colorful words. It is not a reading program per se; reading is a part of it.

This program has been used successfully also with high school pupils in low achievement groups, who for one reason or another did not learn language skills adequately in lower grades.

Reading or remedial reading courses are not taught by TV for classroom use. In-service education courses for teachers have been used with excellent response. Beginning reading, creative writing for slow learners, and developmental reading have been presented by specialists in these fields. Techniques are presented, plus suggestions for making provisions for individual differences.

A course in linguistics is presented by TV for junior high school pupils. This is an experiment to see whether pupils and teachers may benefit together by this approach.

It should be noted that TV courses for instructional purposes in the Philadelphia

Public Schools: (1) are presented at the request of teachers, (2) are voluntarily viewed, and (3) may be viewed in large groups or in individual classes.

The teachers are carefully oriented for TV utilization. A teacher's workshop of five weeks is presented each summer during July and is free unless college credit is desired. Credit from the University of Pennsylvania or Temple University (graduate or undergraduate) may be earned on payment of a fee, and with the approval of the University adviser.

TV utilization is considered an aspect of team teaching. The TV teacher presents, demonstrates, and provides resource materials. The classroom teacher reviews, reinforces, guides pupils in applications and understanding, and assigns further outside work. The classroom teacher also evaluates pupil achievement. The pupils therefore have the benefit of the skills of two teachers, each specializing in different aspects of the teaching process.

TV sets are supplied to schools which request them and directions given on how and where they are to be used.

The audience for TV lessons has increased in the schools as teachers recognize the values. If lessons are not used they are dropped. Therefore, the Radio-TV staff must produce useful, acceptable programs in order to attract and maintain a school audience. The curriculum specialists who work with the staff in planning programs encourage teachers to view and evaluate them. Evaluation forms are sent to all schools. Teachers who utilize the various programs mail these to the Radio-TV Office at regular intervals. The entire TV operation is one of coordinated, cooperative teamwork.

## C. SENIOR HIGH SCHOOL

### 1. Using the Multi-Media in Building Reading Power

H. M. NASON

THE ADVANCES of technology are not without their impact in today's classrooms: the new and greater demands so imposed upon the schools are accompanied by devices that help teachers to meet the challenge.

Overhead projectors, precision-geared tapes in language laboratories, tachistoscopes and television sets—these classroom helps and others are inspired by technology to prepare students for the demands it will later make upon them.

Selecting and using the new multi-media in school education brings many questions, not only for teachers, but for administrators, school board members, parents, and taxpayers. A major difficulty in making adequate use of present possibilities is that of evaluating properly the usefulness and value of the newer media as teaching devices.

Any reliable statement of the use that can be made of the available multi-media in developing power in the reading act, for example, must involve the variable of teacher use, together with all the complexities inherent in the planning of a program, as well as the nature of the program itself.

One of the facets of multi-media which we are developing in Nova Scotia is our School Television program. It is based on the principle that real knowledge and skill are dependent upon practical experience, concrete things and events, things that can be heard and seen. Such experience is an essential element in the education of every child. The television camera is one method of providing in the classroom some of these experiences of sight and hearing.

The success of school telecasts seem to rest on two conditions: the teacher must expect the telecast lesson to fit into his own lesson plan, and the producer must expect full classroom use of his telecast by the teacher. The teacher must plan and think ahead. He must choose the right programs to fit into his classroom plans and to suit his educational aims. To combine his own capabilities and resources with those of the telecast for the greatest benefit to the pupils plans must insure the active cooperation of technicians, teachers, and administrators.

In Nova Scotia we add to these three the parents and the public. The fact that our school telecasts are not on closed circuit means they enter living rooms as well as classrooms. We have encouraged parents to view the programs, supplied the teaching guides and other aids to the many who have been spurred to study the courses. We have promoted the freeing of office personnel to take advantage of the courses, and arranged for these adult students to write provincially-set examinations.

According to our experience one of the most interesting uses of educational television in building reading power can be to familiarize adults with the methods teachers are using to teach their children to read. Through interest and growth in adult reading skills resulting from use of school TV programs and other available multi-media, home and school and community are brought into a working harmony that should make the teacher's task in developing reading power in children less difficult.

In addition, school television can help to orient the pre-school child and his parents towards realizing the standards required by the school in the teaching of reading and to assist the transition from home to school.

As our thinking advances regarding use of multi-media we must involve the teacher even more fully in research projects and in planning for changes in approach. As changes in approach are made, we must involve parents and other adults, so as to avoid the tensions that are caused when the people involved in the educative process are working at cross purposes.

## 2. Improving Reading Rates

WALTER J. MOORE

MUCH OF the confusion regarding the improvement of reading rates would be dispelled if teaching to improve rates per se could be dissociated from accompanying disabilities or handicaps. Teachers at varying levels need to come to agreement with respect to what reading is. A commonly held definition conceives of reading as a single unitary process relating primarily to word perception. Take, for example, the position held by Fries: "The process of learning to read in one's native language is the *process of transfer* from the auditory signs for language signals, which the child has already learned, to the new visual signs for the same signals."[1] This is the first stage of reading. The second stage is accomplished when the reader's responses to the visual patterns become so automatic that the significant identifying features of the graphic shapes themselves sink below the threshold of conscious attention. The last stage of reading is reached when the reading process has become so automatic that the reader can use "reading equally with or even more fully than the live language of speech in acquiring and assimilating new experiences."[2]

Fries would argue that difficulties began when reading experts insisted that reading involved "stimulating and cultivating the techniques of thinking, evaluating, and so on . . . for these are and must be developed through *the uses of language*."[3]

If reading is the result of a single process primarily involving word perception—which it is not—then many of the currently held misconceptions regarding rates can be explained. Many of the reported attempts to improve rates have centered on the improvement of word perception skills and to a more limited extent, to the improvement of comprehension. Both word perception and comprehension have been more or less acceptably defined, but less thoughtful attention has been directed at other and more important components of reading. These include the thoughtful reaction involving both critical evaluation and appreciative responses, and assimilation, or the integration with previous experiences of the ideas acquired through reading.

It is at this point that most reading improvement programs have been failures. They may have improved rates, that is, have improved perceptual habits which in turn have made it possible for the reader to proceed more rapidly. Or, such programs may have resulted in improved comprehension as revealed by increased ability in answering questions aimed at disclosing the reader's ability to literally recount what has been covered. Such programs have not usually ventured into the realm of critical reading or creative reading, such as is found in versatility in modes of thinking about content or in bringing to bear special types of interpretation—historical, geographical, mathematical, scientific.

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[1] Charles C. Fries, *Linguistics and Reading*. New York: Holt, Rinehart & Winston, 1963, p. 188.

[2] Charles C. Fries, op. cit., p. 208.

[3] Charles C. Fries, op. cit., pp. 115-118.

Nason and McDonald in discussing reading flexibility agree that the term has been interpreted in a number of ways, and that there still is some ambiguity surrounding the term—what it is, how it may be measured, and how it may be developed.

> Flexibility is most commonly thought of in terms of *rate flexibility* (i.e., "varying rate to suit purpose"). It has been asserted, on the basis of a priori reasoning, that a flexible reader could and would select the *speed* which was best suited to his purpose and to the reading material. He would also deliberately vary his rate within the article to meet different kinds of reading situations. Mistaking rate change as a *means* of achieving flexibility rather than as a *result* has led many reading instructors and texts to direct students to vary their rate, "shifting gears" to a higher or lower rate when encountering easier or more difficult ideas, or when their comprehension needs were less or greater. *The assumption that readers can vary their rate at will is fundamental to the rate-flexibility concept. Research, however, does not support this premise.*[4]

The writers offer many suggestions which will assist the reader to attain flexibility. Identifying careful or intensive reading, casual reading, accelerated reading, and selective reading, they make the point that the achievement of reading flexibility does not just "happen," for it is a composite of many factors that are trained, taught, and encouraged through an individual's reading career.

Undoubtedly there are many individuals who adopt a way of reading at what Witty has called a "congenial pace"[5] which is far below the level of speed and comprehension at which they might read with pleasure and efficiency. Doubtless, too, Cuomo is right in maintaining that all people have "base" rates and that the reader with the better base rates may move up to very fast rates indeed. He goes on to observe that "he has—or should have—many rates."[6]

Many individuals labor under the mistaken impression that if they are successful in increasing their rates of reading, comprehension will automatically fall into line and that even memory will improve. All too often such individuals feel that the answer to their problems are to be found in reading "instruments." In 1962, Taylor reported on an earlier survey conducted through the IRA which revealed that approximately 59 per cent of the respondents employed one or more types of reading instruments at one level or another. The article treats the instruments in four categories: those using tachistoscopic exposures, those with directional attack control, those employing acceleration principles, and those designed to improve skimming and scanning. Taylor observes that:

> All instrument techniques have proved to be highly motivating and successful in encouraging students to apply themselves. They vary, however, in the skills they attempt to develop. They also vary in their success in achieving their purposes, according to the soundness of their training principles, and the adequacy of their accompanying materials, and the manner in which they are used.[7]

Taylor's conclusion might well be our own:

> In discussing reading instruments and procedures, every producer acknowledges that such techniques were conceived as aids to the teacher, not replacements; as part of a total program, not a complete approacn; as developing certain specific skills and abilities, not as a panacea. There is a conviction, however, on the part of all who understand the function of instrument techniques, that they play an indispensable role in the balanced reading program of today and will play an increasingly important part in the schools of tomorrow, as the need is felt to teach more content in less time and to develop each student to his fullest potential.[8]

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[4] Harold M. Nason and Arthur S. McDonald. "Reading Flexibility," *Educational Developmental Laboratories Reading Newsletter*, 31 (January, 1964), 1-2.

[5] Paul Witty, Theodore Stolarz and William Cooper. "The Improvement of Reading Rate and Comprehension in Adults," *The Reading Teacher*, XIII (December, 1959), 123.

[6] George Cuomo. "How Fast Should a Person Read?" *Saturday Review of Literature* (April 21, 1962), pp. 13-14.

[7] Stanford E. Taylor, "Reading Instrument Usage," *The Reading Teacher*, XV (May, 1962), p. 449.

[8] Stanford E. Taylor, op. cit., p. 454.

## 3. Using New Media to Promote Effective Critical Reading

ROBERT E. SHAFER

THE NEED continues to exist for the development of a theory of critical reading adequate for the uses of reading in an electronic age. In a recent forecast of the future of reading research, Robinson (1) pointed out that: "So far little conclusive evidence has been gathered to guide teachers as to the age or grade level at which critical reading can be introduced or the sequence of teaching the essential skills."

The major reason that such a sequence in the teaching of critical reading has not been developed appears to be the lack of an adequate operational definition of critical reading conceived in such a way as to accommodate the changes in human perception and sensibility brought about by the revolution in communication which has taken place in the twentieth century. The elements necessary for an adequate theory of critical reading are present in a variety of disciplines, ranging from cultural anthropology through literary criticism. It remains for research workers in reading to synthesize these elements into a usable theory which will permit new significant research studies as well as teaching methods and materials.

### What Is Critical Reading?

In a recent article Smith (2) pointed out the confused status of attempts to define the term "critical reading." In the interest of developing an operational definition, she provided the following: "According to the writer's thinking, *critical reading* includes literal comprehension and interpretation as defined above, but it goes further than either of these processes in that the reader evaluates, passes personal judgment on the quality, the value, the accuracy, and the truthfulness of what is read."

Granted that the above definition is an acceptable one, the problem is immediately raised as to the complexity of describing any one reader in the process of "evaluating or passing personal judgment on the quality, the value, the accuracy, and the truthfulness" of what he reads. The purpose of this paper is to discuss several of the factors necessary to understand the processes of critical reading as described above.

### The Environmental Element

We sometimes act as though we believe that reading takes place entirely as an interaction between a reader and a book rather than between a reader and a writer, through a book in a specific situation at a particular point in time. The implication of modern communication studies would seem to suggest that our view of the variables affecting reading has been too limiting. Burton (3) sees reading in a broad historical context:

> In the early days of history, people read in a broad sense long before they learned to read printed or written words. They read directly the forces of nature, the actions and reactions of their friends and enemies. They possessed oral language and communicated by word of mouth, but had no transcribed language, hence nothing to read as we know reading today. Reading in a limited sense originated over a long period of time, during which man began to use pictures and subsequently developed a method of hieroglyphic writing. Centuries later reading in the limited sense was implemented by the invention of the alphabet. Then it received another impetus with the invention of printing, which in turn led to the invention of the printing press. Thus, through thousands of years people have evolved, within the framework of reading in the broad sense, a method of reading in the limited or specialized sense.

The advantage of viewing reading in its broad or cultural sense as well as in its narrow specialized sense is that it allows for the study of the effect of certain social and cultural forces upon the more limited aspects of reading. Development of the study of certain of these forces can only be suggested in this paper, but it seems clear that much more attention to them is needed if we are to formulate an adequate definition of reading comprehension, particularly those elements concerned in critical reading at highest levels of comprehension. As McDonald (4) has stated, "Modern linguistic studies have shown that reading (as one of the means of human communication) is a set of cultural associations taking place in a structured social situation." The fact is that these "cultural associations" are conditioned by "social situations."

The perspectives of the new electronic media of communication are providing a broader context for critical reading by changing the environment in which all reading takes place. This may seem to some at first an interesting speculation which has little relevance to the practical aspects of teaching critical reading in the classroom. However, upon reflection they will ultimately be forced to McLuhan's (5) conclusion that in a world of electronic communication children are growing up in a "classroom without walls," and that for all practical purposes the effect is "to institute a dynamic process that re-shapes every aspect of thought, language, and society." That such reshaping is occurring is substantiated by Witty (6) who reported that "the 1962 study (of children's televiewing time) showed an average of 16 hours per week in grade two, 23 in grade four, and 25 in grade five." To suggest some of the things children learn from reading television, Witty, in the same article mentions an article by Robert Goldenson in the November 1956 issue of *Parent's Magazine* which includes a remarkable composition by a ten-year-old boy describing, with a high degree of accuracy, a heart operation on a little girl. This was based only on a single five-minute sequence seen on television. There are many other similar examples of the fact that young people are already doing intensive critical reading of film and television. Much of this critical reading in the media is the result of incidental learning undoubtedly combining the results of prolonged exposure in these media with a transfer from critical reading activity in printed materials.

### Methodological and Technological Contexts

In 1957 Vance Packard published his book, *The Hidden Persuaders,* which was as graphic an account as has ever been written of the systematic use of key cultural symbols to change the behavior of American consumers along carefully structured lines. The need for carefully developed programs of critical reading using the mass media has never been more carefully or clearly documented. One might have thought that new programs of critical reading would have developed in most secondary schools to meet the challenge of Packard's and other similar books. On the contrary, we have little evidence that such programs focusing upon the newer media of communication have developed. The recent publication, *Using Mass Media,* edited by William Boutwell, growing from the work of the Committee of Mass Communication of the National Council of Teachers of English is a compendium of models for the teaching of critical reading via the newer media of communication. Together with Postman's *Television and the Teaching of English* a valuable foundation has been laid for the development of critical reading programs using the newer media.

If one looks closely it is possible to see some developing programs of critical reading in the mass media. In most instances these programs are masquerading under names like film appreciation and screen education, but it should be clear that such programs are efforts to establish patterns of flexibility in the reader which will enable him to read the newer media of communication with as much power and sophistication as he is now being taught to read modern poetry or the new mathematics. Surprisingly many of the recent developments are taking place in Europe with interest in this country having dropped off considerably since 1942.

With new designs in school buildings and facilities which will make film and television easily accessible to the classroom, similar programs should develop rapidly. One technological development in particular should be noted—that of the development of 8mm sound film in education, which promises to make the 8mm the "paperback of the film field."

Other technological potentials for critical reading lie in both commercial and educational television, video tape, and the increased use of the commercial motion picture in education. The development of critical reading programs utilizing these media in our elementary and secondary schools would, to a large extent, enable our citizens of the future to read the mass media of communication with full powers of critical awareness which they will need to do if they are to make the political, economic, social, cultural, and aesthetic decisions necessary to the fullest sense of fulfillment and selfhood that our society can provide for the future.

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5. Marshall McLuhan, "The Media Fit the Battle of Jericho," *Explorations 6: Studies in Culture and Communication*, The University of Toronto, Toronto, 1956, p. 17.
6. Paul Witty and Paul Kinsella, "Televiewing: Some Observations from Studies 1949-1962," *Elementary English*, Volume XXXIX, No. 8, December, 1962, p. 772.

## 4. Teaching Reading via Television

C. MICHAEL O'DONNELL

"HIGH SCHOOL READING" is a ten-week basic remedial reading course consisting of twenty 30-minute television lessons. The television classes, each a complete consideration of one reading skill, have been recorded on video tape. This was made possible through a grant from the Ford Foundation. The series is now being televised on the Maine and New Hampshire ETV Network.

The course was planned for use by ninth grade students having difficulty in reading. It was assumed that the secondary teachers using the series would not have any professional training in reading.

The television lessons are used to initiate or introduce the nineteen skills studied in the course. There are two telecasts a week, followed by three days of classroom instruction. A comprehensive manual was prepared for use by teachers without a reading background, to facilitate adequate pre-telecast, post-telecast, and classroom instruction. The manual takes the classroom teacher through every phase of the course, including suggestions for brief pre-telecast activities, daily assignments in five different skill books, lesson plans for off-telecast days, and helpful hints for dealing with individual differences.

The instructional level of "High School Reading" is upper grade six. Many of the exercises cover skills that students have traversed before. However, teachers were advised to follow all the lessons outlined in the guide. The course is corrective in that it stresses basic reading skills rather than accelerated developmental reading. Schools using the series were asked to avoid the terms "remedial" or "corrective" when deciding on a course title or dealing with students and parents.

Ninth grade students were screened for enrollment in the series on the basis of results from group reading tests. It was felt that students reading either above grade eight or below grade six would not benefit greatly from participation in the course. No attempt was made to classify students according to mental ability.

The basic text selected for the course is *Tactics*, a special paperback edition published for "High School Reading" by Scott, Foresman and Company. Four alternate skill books were also adapted to the course. They are as follows: *Advanced Skills in Reading*, Macmillan Company; *Be A Better Reader*, Prentice-Hall; *How To Improve Your Reading Ability*, Science Research Associates; *Basic Reading Skills for High School Use*, Scott, Foresman and Company. In addition to a basic text, schools were given a list of twenty-five scholastic paperback selections and requested to purchase at least two for every student enrolled in the course. These books were reviewed in the first telecast.

The preparation of each one-half hour television lesson involved two considerations, to visualize abstract reading concepts and make lessons interesting to students who were not particularly motivated. An effort was made throughout the series to encourage students to stay in school by using subject matter pertaining to the drop out problem.

The traditional way of starting a reading course by introducing word attack skills was changed in favor of comprehension exercises. Since many of the students enrolled in the series would be having difficulty in their "reading" subjects, such as social studies, it was felt that comprehension exercises would provide the participant with an opportunity to find immediate application of the reading lessons in other subject areas.

The first television lesson was used to review the twenty-five paperback selections that were used to stimulate independent reading. Several devices were employed to review the books such as scenes acted out by University students, film clips, dialogues, actual reading, and still pictures. Teachers were requested not to require their students to make either oral or written book reports. In an initial survey of 832 students enrolled in the course, it was found that each student read an average of 4.7 books during the ten-week period.

Examples of production and techniques used to introduce skills were as follows: a giant crossword puzzle to climax the lesson on dictionary skills, a man-size blowup of a textbook to use in demonstrating study skills, a vowel record hop used to introduce a unit on word sound, a working model of an automobile used to compare familiar auto parts with familiar parts in unknown words and illustrate the idea of words as a structure of interrelated parts.

"High School Reading" was not developed to provide a panacea for some of the difficulties that secondary school students were having in reading. The primary purpose of the course was to give secondary teachers an insight into the reading process and to demonstrate practical methods for offering an expanded program. Many former users of the series eventually enrolled in extension centers and summer schools that offered courses in reading, with the intention of working full time in this area.

Although no scientific testing program was attempted, because of limited funds, some schools reported student reading gains, but most important, many students were made to re-evaluate their goals and attempt to improve their reading ability.

## D. COLLEGE

### 1. Programed Learning and College Reading—The State of the Art

RICHARD L. CARNER

ALTHOUGH programed learning is the subject of an ever-increasing number of articles and studies each year it should be noted that the state of the art is such that not one single programed reading course for college students was listed in *Programs, '63,*[1] a volume which describes all the auto-instructional programs which were available up to the time of its publication. Thus far, it appears that the major focus in programed reading materials has been on the elementary or junior high school level. In spite of the fact that this disclosure would seem to preclude further discussion, there are aspects of programed instruction which could serve to improve existing college reading programs.

The major goal of programed instruction, whether it is through the use of elaborate machines or the scrambled book, is to so direct student responses that learning is maximal for time and effort. In programed instruction this means that the student (1) proceeds at his own rate, which automatically reduces the frustration of trying to attain or maintain too rapid a pace, (2) receives an immediate feedback concerning the correctness of his response and whether he should proceed or re-study specific items, (3) is constantly under the guidance of a "built-in" tutor who quizzes him at the end of each logical step and even praises him for the successful completion of a task, and (4) reviews each item in the program as needed to assure proper mastery or development of a skill.

In addition to sound psychological principles of learning, the study of techniques of programing has already contributed greatly to educational practice in all fields by emphasizing the need to create understandable and clear-cut objectives. Fuzzy or inexact objectives in programed learning simply cannot be tolerated since each step of the program requires a specific response or kind of behavior.

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[1] *Programs '63, A Guide to Programed Instructional Materials.* Washington: U. S. Government Printing Office, 1963.

Literature books in particular are guilty of using hazy, obscure objectives. In a poetry unit in one such book, "a heightened appreciation of poetry's contributions to man's understandings" is stated as the main objective. It is readily obvious that a teacher would be hard pressed to describe with any exactitude, behavior which would be indicative of the achievement of this objective. Another well known literature book lists the following items as the major objectives for student learning: *comprehension, vocabulary development, interpretation of content, rate of reading, critical evaluation, use of source material, appreciation of content, organization of content, fact finding, problem solution, and cause and effect relations.*

On the surface they appear to be reasonable objectives for students who are to profit from the experience of reading this text. But what is meant specifically by "developing comprehension," "appreciation of content," "use of source materials," or "critical evaluation?" None of these stated objectives gives the slightest clue concerning what we expect each pupil to *do* when he demonstrates acquisition of these skills.

In contrast to objectives which are open to all kinds of interpretation we find that *behavioral* terms such as "to write," "to identify," "to recite," "to construct," "to outline," "to contrast," or "to locate" describe what we want the student to *do* when learning is complette. Therefore, it seems appropriate to acknowledge that the field of programed learning has contributed to education by pointing out that the objectives must (1) describe terminal behavior desired from a learning experience with a minimum of ambiguity, (2) identify the specific conditions under which the behavior is expected to occur as evidence of achievement, and (3) specify minimum acceptable performance in terms of time limits, number of correct responses, or specific standards of performance.

## Programed Reading Instruction

It appears quite probable that autoinstruction will have an influence on college reading programs in the years to come—particularly in the areas of reading rate, comprehension, and vocabulary development.

*Rate of Reading:* One of the major areas of emphasis in college level reading programs has been the development of greater rates of reading. Many college students are handicapped by a slow reading rate and are justifiably concerned about it. For good or ill, machines of various types have been widely used to help students increase their reading rate. Most such approaches, however, do not represent programed learning in that most machines rigidly and artificially control the rate at which the individual is to read. This is often frustrating to those students who are forced to proceed too slowly or more rapidly than they are able. New levels of sophistication in developing reading rate may be in the offing as autoinstructional techniques improve. The major problem in producing effective rate building programs will be in finding solid answers to such questions as, "What constitutes acceptable reading rates for college students when they are reading various types of materials with changing purposes?" and "What levels of comprehension will be acceptable at these rates?"

*Vocabulary:* It appears now that vocabulary development has become the prime target for programed materials within the reading skills framework. Several programed workbooks are now available for students ranging from the elementary to college level. As with much of the programed material available, items tend to use context clues as a basis for presenting new learning.

*Comprehension:* Perhaps the greatest need for intensive and thorough autoinstructional programs in reading is in the development of comprehension skills. It is also apparent that least has been done in this area. At the college level such programed instruction could help students to develop much needed critical reading skills. Convergent thinking, deductive reasoning, sensing cause and effect relationships, drawing conclusions, and organizational skills would seem to be appropriate areas in which to create programed materials for college students. It is highly probable that the demand for good programed materials in comprehension will be met within the next few years.

The current need in the area of programed learning as it relates to college level reading programs is for good definitive studies which will probe such problem areas as (1) the transfer value of such training, (2) if there is a novelty effect, (3) what skills within the scope of college reading programs are best adapted to programed instruction, or (4) if such instruction is more suited to corrective or developmental college reading courses. At this point, it seems that we have considerable knowledge of the principles and techniques of auto-instruction. It remains to be seen how effectively these techniques and principles can be translated into practical and effective college reading programs throughout the country.

## 2. A Multi-Media Approach to Teaching Vocabulary

JAMES I. BROWN

RECENT research by Holmes[1] indicates that vocabulary factors contribute most significantly to reading power and speed, both in terms of number and amount. Concomitant research on teaching machines and programed instruction has brought results spectacular enough to evoke the phrase "revolution in education."[2]

A specially devised approach to vocabulary, incorporating these research findings, would seem to hold particular promise. As subject matter, twenty prefixes and fourteen roots were selected for study, elements found in over 14,000 words of desk dictionary size, a selection described in "A Master-Word Approach to Vocabulary"[3] and, in more popular form, in "The 14 Words That Make All the Difference."[4]

The first move was to establish the best possible visual setting for getting the students to think in terms of prefix, root, and suffix elements. Research by Tyler[5] on the relative permanency of learning pointed up the value of visual associations. After 15 months, without such associations students forgot 72 per cent of the technical terms learned. With visual associations, the loss was cut to only 22 per cent. In short, visual elements made learning more than twice as productive.

For this reason, PYRAMID was used—a pocket-size word-building laboratory containing 70 prefix, root, suffix, and word-ending cards. Color coding sharpens the student's awareness of parts, letting him see visually just how they combine to make words. For example, more than fifty different words can be built around the single root card, *vis*(*e*) or *vid*(*e*), from *videre*, "to see."

Within this visual setting, a programed approach was developed to teach each of the 34 prefix and root elements. Two somewhat atypical assumptions were basic to the preparation of the material: (1) that it is possible to teach a few elements in such a way as to bring an understanding of many more, and (2) that it is not only possible but often a distinct advantage to use programed instruction as group instruction.

With these assumptions in mind, the programed material was designed to teach the 34 elements in such a way as to make a maximum contribution to the student's development of appropriate word-attack techniques. To explore the potential of programing for group instruction, all 34 units were used in class, through means of an overhead projector. A copy machine was used to make transparencies from typed pages for immediate use.

These key elements were taught in depth, the frames leading the student through four degrees of knowing, from rote knowledge of prefix or root meaning to its accurate identification in a word, then on to the important step of application, followed by generalizations useful in dealing with all derivational elements.

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[1] Jack A. Holmes, "The Substrata-Factor Theory of Reading: Some Experimental Evidence," *New Frontiers of Reading* (J. Allen Figurel, editor), International Reading Association Conference Proceedings, 1960, pp. 115-121.

[2] James G. Holland and B. F. Skinner, *The Analysis of Behavior*. New York: McGraw-Hill Book Co., Inc., 1961, p. v.

[3] James I. Brown, "A Master-Word Approach to Vocabulary," *Word Study*, 124 (May, 1949).

[4] Leonard A. Stevens, "The 14 Words That Make All the Difference," *Coronet*, 33 (August, 1956), pp. 80-82.

[5] R. W. Tyler, "Permanency of Learning," *Journal of Higher Education*, 4 (April, 1933), pp. 203-4.

[6] Ernest Thompson, "The 'Master Word' Approach to Vocabulary Training," *Journal of Developmental Reading*, II (Autumn, 1958), pp. 62-66.

For example, a student might know that *ad-* meant "to or toward" but might not be able to identify that prefix in such words as *allocate* or *attend*. Furthermore, he might bog down before reaching the all-important application stage and not be able to put his knowledge to effective use in dealing with strange words. A four-part test was devised to measure the student's performance at each stage, following earlier test explorations in this area reported by Thompson.[6]

Results were gratifying. Students indicated strong interest in programed instruction. In student ratings of seven class activities, programing was at the very top. Objective results were even more gratifying. Those students who saw from 14 to 22 of the 34 units made 30.3 per cent improvement on the four-part test. Those seeing 33 or 34 units made 51.6 per cent improvement.

Interest in this approach led the University to present a 13-week telecourse—"Words, Words, Words"—in which six units from a special edition[7] were shown over the air. After the series a 15-minute film was made on "Teaching Programed Vocabulary with the Overhead Projector."

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[7] James I. Brown, *Programed Vocabulary: Steps Toward Improved Word Power* (Overhead Projector Edition), New York: Appleton-Century-Crofts, 1964.

# SEQUENCE VII
# CLINICAL ASPECTS OF READING

## A. ELEMENTARY SCHOOL

### 1. Identifying and Diagnosing the Retarded Reader

STELLA M. COHN

WHO IS the Retarded Reader?

In the *Handbook of the Special Reading Services*,[1] we define retarded readers as "those children for whom learning to read presents marked difficulty in spite of being equipped by chronological age and general intelligence to benefit normally from instruction. They are members of all kinds of families. Some of their parents are illiterate; some speak only a very little English; but others are widely read and some are college graduates."

#### Identifying the Retarded Reader

In the annual report of the Special Reading Services 1956-1957 we drew a profile of a typical reading disability child. This profile was based on the summarization of 35 case studies which were analyzed in detail. This child would be male, nine years old, and in the fourth grade. He would have at least average intelligence—usually above average intelligence—and probably would be doing nearly as poorly in arithmetic as in reading. In the classroom he would appear to suffer from severe anxiety, hyperactivity, depressive trends, and fearfulness. He would usually have periods of excessive day dreaming and distractibility. These symptoms occurred in two-thirds of our children. In his early school history we probably find an absence of kindergarten experience, a chronological age of below six years on entering first grade and various unfortunate early school experiences such as frequent changes of school or teachers, serious illnesses, and excessive absences.

#### Guide Posts in the Diagnostic Procedure

No reading disability is the result of a single factor. Many retarded readers reveal a multiplicity of causes, any one or several in combination might be a contributory factor to the reading problem. Frequently these causative factors react upon each other and compound the problem. *Diagnosis should include all aspects of the pupil and his reading act: physical factors, intellectual factors, personality factors, environmental and educational factors.*

*The Physical Factors*

Physical factors, although sometimes insignificant in nature, may affect the pupil and his learning ability. Any discomfort will reduce the child's effectiveness in the classroom situation. Some major physical factors are defective vision, speech and hearing, glandular imbalance and neurological problems.

There is another group of children who manifest problems in dominance or have directional confusion. Either of these difficulties frequently may interfere with learning to read.

*The Intellectual Factor*

There seems to be some disagreement in recent years on the use of the intelligence tests. Some authors have expressed disfavor in comparing intelligence and reading achievement. They argue that many group intelligence tests and some individual tests are measures of specific reading abilities. In fact, it is stated[2, 3] that these tests penalize poor readers and significantly underestimate their probable mental ability.

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[1] *Handbook of the Special Reading Services* of the New York City Board of Education, September 1964, Stella M. Cohn, Director.

[2] G. L. Bond and L. C. Fay, "A Comparison of the Performance of Good and Poor Readers on the Individual Items of the Standard-Binet Scale, Forms L and M," *Journal of Educational Research*, 43 (February 1950), pp. 475-79.

[3] G. D. Spache, "Estimating Reading Capacity," *Evaluation in Reading*, Helen M. Robinson, editor, Supplementary Educational Monographs, No. 88, Chicago: University of Chicago Press, 1958, pp. 15-20.

*The Personality Factor*

Diagnosis of personality factors is often complicated by the fact that good readers do exhibit some of the same problems of adjustment as do the disabled readers.

A diagnosis must include an assessment of the pupil in his relationship with his teachers, with his classmates and with members of his family. Many sensitive teachers have learned to look behind the child's behavior.

*Environmental Factors*

In order to obtain a complete picture of the child it is important that parental attitudes be studied. Many home environments influence a child's reading behavior. Helen Robinson[4] reports that 54.5 per cent of the retarded readers she worked with came from maladjusted homes. It is also important to know the parental attitudes towards a pupil's reading disability.

In order to evaluate these environmental influences the reading specialist will observe the child, note how he is accepted by his peers and how he relates to his classmates.

*Educational Factors*

Poor teaching, an unhealthy emotional climate in the classroom, unsuitable materials of instruction, and inadequately prepared teachers are among the factors that may cause a reading difficulty. Excessive pupil absence may be another causative factor. In New York City today a very serious problem confronting the school personnel is the high incidence of pupil mobility. Other factors are staff shortage and turnover.

### Diagnosis Must Be Continuous and Should Include Plans to Improve the Reading Act

In providing a program of correction the specialist needs to re-evaluate the diagnosis continuously. For those children who are making progress, it is necessary to provide further diagnosis so that old needs are met and new needs are recognized and provided for. For those children who do not appear to be undergoing any perceptible changes, it may be necessary to use additional measurements or supplementary appraisals and evaluative techniques. In addition, there should be a program of corrective procedures.

### Diagnosis Must Include Informal Procedures as Well as Standardized Tests

In making a diagnosis, regardless of what environmental, educational, behavioral, or physical problems brought the reading difficulty about, it is essential to study the reading disability and proceed to correct it. This may be done by informal as well as formal procedures. In using the informal approaches, the examiner should proceed as systematically as possible.

A careful analysis of the child's reading disability not only determines its nature, but should also point up the specific weaknesses in skills. This analysis should also include the instructional plans for overcoming weaknesses found.

In concluding I would like to quote from the *Handbook of the Special Reading Services:*[5]

> Not to be overlooked are the positive elements which seem never to be completely lacking in a child's situation—no matter how deprived his life has been. It is most important to find out, from the child's record of experiences, at school and at home, evidences of positive interests or aptitudes which can be utilized constructively by both teacher and parent to motivate behavior which will build up the child's self-image. Often the educationally defeated child, once he is stimulated to make the effort to create or achieve something in line with a positive interest of his own, encouraged by teacher and accepted by the parents, looks at himself with new confidence and at this point begins to learn.

## 2. Psychotherapeutic Principles Applied to Remedial Reading

FLORENCE G. ROSWELL

A CHILD with a reading disability has experienced considerable frustration, failure, and despair. Therefore, the use of appropriate reading techniques, although very important, is not enough.

Incorporating some fundamental psychotherapeutic principles into the teaching of the child may help diminish his suffering and sense of inadequacy, thus freeing him to utilize his energies more productively.

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[4] Helen M. Robinson, *Why Pupils Fail in Reading.* Chicago: University of Chicago Press, 1946, p. 222.

[5] *Ibid.*

A constructive relationship with a teacher can be extremely significant to the child. The teacher's belief in the child's dignity and worth is communicated to him through her total acceptance of him despite his failure in school. Moreover, she conveys to him her complete faith in his ability to learn to read. She alleviates his anxiety, to some extent, by assuring him that errors in reading are inevitable at the outset. However, his mistakes will be used in a positive way as indications of the kinds of help he needs.

In developing a satisfactory relationship, a friendly, orderly atmosphere is reassuring and effective. A great deal of conversation between teacher and pupil is not necessary and may even interfere with the instruction. A child need not confide in his teacher regarding his personal problems. Attempts to draw the youngster out are frequently met with rebuffs and may cause resentment on the child's part. However, should he wish to discuss his problems, the teacher listens respectfully, comments naturally and appropriately, but is careful not to stir up anxiety by expressing her own judgments or making interpretations.

Establishing good rapport is based on subtle interpersonal factors. Sometimes it is developed through talking, sometimes through listening, frequently by means of a smile of approval or even merely an expression of understanding.

As the teacher's empathy for the child develops, it is essential that she maintain her objectivity. Otherwise, she becomes overinvolved with the child's problems, which could adversely affect his learning. Then the child finds himself in the precarious position of having to work not only for himself, but to please his teacher also. Thus, he cannot make mistakes freely as was originally suggested by his teacher, and tension might again be engendered.

A structured, well-defined program is advisable and particularly important for the disturbed child. It introduces order into the learning situation and keeps anxiety at a minimum. Setting limits for such a child is also helpful in order that he understands what is considered acceptable behavior. Then he does not have to keep trying the teacher out to see how far he can go. Instead, he can attend to the task at hand.

When a child emphasizes that he is a failure and believes that he is hopeless, the teacher can help externalize his difficulties for him. She interprets his strengths and deficiencies in reading in terms that are understandable to him. In collaboration with him, she sets up attainable goals.

The program itself must convey meaning to the child. He is shown how each activity is related to his specific needs. The teacher then indicates the specific methods and materials that she plans to use to help him achieve these objectives. Thus by concreting his problem for him, it is taken out of the disquieting realm of the unknown, thereby diminishing his phantasies and fears that there may be something seriously wrong with him. Instead, his problem is clarified to some degree, affording a measure of relief and also reviving a feeling of hopefulness in him.

Furthermore, every attempt is made to arouse his interest in reading through the judicious choice of materials. Very often the content of the reading matter brings about emotional growth. Children frequently identify with characters in stories and biographies because their conflicts, loneliness, and patterns of success and failure seem similar to their own. Such material can promote emotional release, self-understanding and insight into others. On the other hand, stories that are humorous or sheer nonsense may contribute to an easy, relaxed relationship.

Providing children with a wide selection of topics and subject matter can also have a salutary effect on personality development. Most children with reading disability are not only emotionally impoverished, but are also intellectually sterile. Thus, through broadening their knowledge and heightening their awareness of the world around them, these children can be brought into closer touch with reality and may also be helped in extending concept formation.

Effective reading instruction is therapeutic and can have a far-reaching influence on the child. It could liberate constructive forces within him, which may eventually lead to self-realization, a universal human goal.

## 3. How They Learn and Why They Fail

JEANNE CHALL

THE CAUSES of reading failure have been pursued from many different vantage points. During the 1950's the prevailing view on causation was the possibility of multiplicity of causes—personal and environmental—any one or a combination of which could be significant in the failure of a particular child. Recently, however, there has been a renewed interest in the importance of a beginning reading method. Thus many phonic proponents and, more recently, linguistic scientists have claimed that the heavy emphasis on a sight (meaning) approach rather than on a phonic (phoneme-grapheme correspondence) approach in the initial stages of learning to read is to blame for the current crop of failures.

To gain some insight into this claim, an analysis of six reports of children who failed, published between 1922 and 1946, was undertaken.[1] The six are the well-known reports of reading disability cases by Gray (1922), Gates (1922), Monroe (1932), Orton (1937), Fernald (1943), and Robinson (1946), veritable classics in the field.

Since the reading disability cases upon which these studies were based received their initial reading instruction at times when different emphases were practiced generally, it was believed that something could be learned about the validity of the recent claims regarding the importance of beginning reading methods in the etiology of failure.

Gray (1922) and Gates (1922) published their studies at a time when according to Nila Smith (1963) phonics was being abandoned as a beginning reading emphasis—1920 to 1935. However, since it takes at least a year or two to write up a study, and the children received their before, we can infer that most of them initial reading instruction several years received their initial reading instruction at a time when phonics was emphasized—1890 to 1920. The children studied by Monroe (1932), Orton (1937), and Fernald (1943) probably received their initial instruction during a heavy sight (meaning) emphasis. Helen Robinson's (1946) cases probably learned during a period of renewed interest in phonics as a supplement to a sight (meaning) emphasis.

An analysis of the six reports led to the following generalizations. They are not final conclusions but should instead be considered hypotheses deserving further study today.

1. Each emphasis, whether heavy phonic or heavy sight, appeared to produce failures.

2. Regardless of the particular emphasis to which the poor readers were initially exposed, they had difficulty with word recognition and analysis (phonics), the very weakness that phonic proponents attribute only to a strong sight (meaning) emphasis.

Whether a particular emphasis produced a greater number of reading failures cannot be determined from these reports for the investigators did not indicate what percentage of the total population of beginners their particular group of reading failures represented. Nor did they indicate specifically which children among their failures had been initially instructed under which emphasis. The descriptions of cases in most of the reports indicate that some children had been taught initially by an emphasis different from the prevailing one.

3. When the investigator described the remedial reading procedures used to retrain his cases, it was found that some form of word analysis or phonics was part of the remedial program, whether or not it was called by these particular names. It would appear that the more severe the disability, the more it was necessary to call in motor (tracing, writing), speech (sounding and blending), and auditory aids to word recognition and analysis.

4. All investigators reported general success with their remedial procedures and noted that once a good inroad was made into overcoming the hurdle of word rec-

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[1] Acknowledgment is given to Marion Klein for her aid in analyzing the six books.

ognition and analysis, the poor reader proceeded in a manner similar to the non-failing child—grouping his words in phrases and attending more to content than to mechanics.

5. With regard to where the fault lies, whether in the initial approach, or in the deficiencies of the child, it appears that there is an interaction effect between the two. Severe reading disability seems to require both—a predisposition in the child and an initial approach that ignores it. Since most reading disability children appear to suffer from difficulties in associating spoken words with their written equivalents, and they benefit from retraining that focuses attention on this association, it would appear that initial methods emphasizing this aspect of reading—and paced to the learner's ability—should produce the fewest failures.

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## B. JUNIOR HIGH SCHOOL

### 1. Classroom Application of Clinical Findings

JAMES JAN-TAUSCH

IT HAS often been said that there is a lag of at least two generations between the discovery of new, more effective educational practices and the common application of such practices in the classroom.

Despite this common knowledge, very few educators appear to be greatly concerned about the normal, well adjusted, and successful pupils who seem to profit from whatever experiences they are having in the classroom. It may be that there are many children who learn well enough despite the quality of the teaching, or that most of teaching is based on the ability of the normal well adjusted child to learn.

For those children who have failed to learn adequately in the classroom, despite the corrective efforts of the teacher, it is most important that we translate immediately that which we discover in the clinic to that which we do in the classroom. This is true both in the general sense and in terms of the specific child.

In order that we accomplish this, we must look at the processes involved. First, the clinician: The clinician makes a diagnosis by determining the nature of the disability and its cause or causes. He does this by observation, by interview, and by testing. Using these techniques, the clinician gathers pertinent evidence of the child's strengths in learning, weaknesses in learning, uncorrectable disability, and his compensatory assets.

With a mass of data before him, the clinician starts on the perilous journey which too often leads him, the child, and the classroom teacher astray.

The first problem is the selection of the data that is pertinent. Abundance of evidence may distract or confuse the unskilled diagnostician, while a dearth of evidence may lead to incorrect conclusions. Assuming that the clinician is competent in the selection of that which is pertinent, his next difficulty lies in the interpretation of the data collected. Interpretation has two facets—one, the meaning of the data to the clinician, and two, the ability of the clinician to describe his interpretation. This task is equal to that of the artist who must appreciate what he senses, and who then must create that which expresses his appreciation.

As in the case of the artist, the clinician finds it impossible to leave himself out of his creations—I mean interpretations. When the clinician is in need of status or power, he may find it necessary to use technical terms or expressions known only to himself and other clinicians. The result of such efforts is equivalent to that of a person talking to himself. For example, "This child suffers from strephosymbolia. This is probably due to his having monocular vision or confused laterality. It is suggested that he be treated as a mirror reader and efforts be made to change his mixed dominance to right cerebral dominance."

In addition to the ineffectiveness of the use of technical language, there is also the clinician's description and recommendation which is so generalized that it not only fails to convey meaning, but in most cases it makes the classroom teacher feel even more helpless than she was before the child was referred to the clinician.

If the written diagnosis is the means of communication between the clinician and the classroom teacher, the teacher's understanding of what the specific disability is and the corrective procedure to be followed to eliminate or compensate for it will largely depend upon the *clinician's* knowledge of the classroom environment (that is, the teacher's competence, the composition of the class, and the materials available, etc.) and his own competence as a classroom teacher, or it will depend on the classroom teacher's competence as a clinician and her knowledge of corrective techniques and her adaptability in the use of these techniques.

Second, the classroom teacher: Most classroom teachers who have responded to the question, "In what form do you profit most from the clinician?" have replied along these lines: "First, I want information about the child I didn't have before I referred the child to the clinician. Second, I want psychological insight into why a recommended teaching method is most effective with the particular child referred. Third, I want to see a demonstration of that method and the use of the appropriate materials by an expert. I would respect the clinician more if he could make such a demonstration. Fourth, I want friendly expert criticism of my own efforts to put these into practice."

In New Jersey, the State Department of Education has approved a combination clinician-classroom teacher under the title, Remedial Instructor. In my opinion, this person functions most effectively in the classroom application of clinical findings.

The Remedial Instructor, upon receiving a referral, goes to the child's classroom and (1) discusses, with the teacher, the child and problem as the teacher sees it, and (2 )observes the child in a learning situation in his normal classroom setting.

Fortified with the information he has obtained, the Remedial Instructor does whatever diagnostic testing seems appropriate and then consults with the school psychologist, school social worker, guidance counselor, school medical personnel, and any other available and involved educational resource. As a result of this consultation, an assessment is made of the child in terms of his assets and his disabilities. The teacher is then included in the consultation and a plan of remediation is determined. The classroom teacher finds the responsibility for the solution of the child's problem shared by others, depending on the nature of the problem. In terms of the specific learning disability, the Remedial Instructor makes himself available for interpretation of the findings of the special services personnel, as well as to demonstrate recommended teaching procedures with which the classroom teacher is unfamiliar. The Remedial Instructor assists the teacher in the classroom on request and helps in getting needed special or new educational materials.

## 2. General Principles Underlying Good Remedial Instruction

Lynette Saine

This discussion of general principles underlying good remedial instruction is based on the realization that the effective junior high school reading program is fundamentally developmental in its approach to reading as part of a well-integrated language-arts or communications program. The corrective and/or remedial aspects of the program are not considered as isolated services for small groups and individuals, with no definite relationship to the school program. Rather, correction and remediation are provided through class, laboratory, or clinic with the realization that within the course of reading development some students will reach blocks or face frustrations which they cannot readily overcome without special help. Wide research has shown that some of the most prevalent factors are school practices, emotional disturbances, family and peer relationships, visual difficulties, dominance, brain damage, hearing, and general physical or health problems.[1]

It is realized, furthermore, that reading at the high school level is frequently neglected; therefore, the principles which will be outlined will focus heavily on the functioning of the program rather than upon the more specialized techniques involved in actual instructional procedures. Throughout the discussion the ideas rest heavily on a general treatment of corrective and remedial instruction, done by Robinson in her contribution to the theme of "Development in and Through Reading;"[2] upon a practical volume on the general subject of reading difficulties by Bond and Tinker;[3] on recent psychological applications to the area by Smith and DeChant,[4] and upon brief case studies provided in a carefully documented volume by Spache.[5] Also materials found in the reports of the National Reading Conference and articles in the *Journal of Developmental Reading* permeate many of the ideas presented in this paper.

## The Principles in Summary

In the interest of good remedial instruction the following principles are imperative. Space does not permit their implementation. The complete manuscript may be secured from the author.

1. The faculty and staff should be in substantial agreement as to what constitutes a retarded reader.
2. The remedial or corrective services in junior high school should be structured with full realization of the peculiarities and unanswered questions which exist at this level of secondary education.
3. The effectiveness of corrective or remedial services should be recognized as directly dependent upon the present status of the developmental program, the extent to which a remedial program is needed within the school, the degree of initial diagnosis required for its establishment, and the availability of persons qualified for participation in such a program.
4. Although the teacher must begin at the student's reading level, the sessions with individuals or small groups should be such: (a) that they focus on words that have intrinsic value in their lives, (b) that they develop comprehension with materials which have current significance for them, and (c) that they permit application and utilization of ideas in areas which demonstrate the values of reading.
5. Evaluation of progress in corrective and remedial reading should be a two-fold process in which (a) the student has come to terms with the facts of his reading status and participates continuously in setting and appraising the goals for improvement and (b) the teacher engages in continuous diagnosis and assesses all facets of reading status and then recommends the extent to which the student is ready for re-entry into the regular developmental reading program.
6. Since demonstrable success and increased independence in the use of reading skills are basic criteria for the efficacy of such a program, students who object to participating in remedial classes should not be forced to do so.

## 3. Pupil Behavior: A Clue to Teaching Reading

GLADYS NATCHEZ

UNDERSTANDING the meaning behind behavior yields important clues to effective teaching. One teacher, for instance, changed her approach considerably after taking a second look at her pupils. She had thirty students in her seventh grade English class, reading at fifth grade level and below. At the end of two months she was totally frustrated. She conscientiously tried everything she knew. The pupils remained unruly and rebellious. She felt that nothing further could be done until someone disciplined these children and helped them become more receptive.

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[1] Helen M. Robinson, "Corrective and Remedial Instruction," Chapter XX, in the *Sixtieth Yearbook* of the National Society for the Study of Education, Part I, *Development in and Through Reading*, Edited by Nelson B. Henry. Chicago: The University of Chicago Press, 1961, p. 362.

[2] *Ibid.*, p. 362.

[3] Guy L. Bond and Miles A. Tinker, *Reading Difficulties: Their Diagnosis and Correction*. New York: Appleton-Century-Crofts, 1957, p. 81.

[4] Henry P. Smith and Emerald V. DeChant, *Psychology in Teaching Reading*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1961.

[5] George D. Spache. *Toward Better Reading*. Champaign, Illinois: Garrard Publishing Company, 1963.

She talked to the reading specialist. By sharing her problem and listening to another point of view, she became less antagonistic. During the discussion, she began to realize how hard school must be for those with such low achievement. They were rebelling from frustration—not against her alone. Toward the close of the conference, the teacher asked the reading specialist what she could do. Together they outlined a program.

Although the teacher was still somewhat dubious, she returned to the classroom with more conviction. She enlisted the pupils' interest by telling them the whole plan. First they would have an individual reading appraisal in which they could find out exactly what they could do and where they needed help. This was for their own, not official, use. Also, they would have at their disposal a variety of new materials that the librarian and teacher had collected. The books were especially written to appeal to pupils who disliked reading.

The teacher's renewed concern caught the pupils' attention. Although they responded reluctantly, they soon saw the reason for each procedure. They found the special books less objectionable than the former ones. Some pupils even obtained real pleasure from them.

One of the pupils, Frank, remained a real problem. He was arrogant, refused to do assignments and sat in class doing nothing. The teacher was furious because he threatened to ruin all that she had done. She asked the reading specialist to come to see him.

The day the specialist arrived, she found Frank tearing bits of paper and rolling them into small balls. In contrast to this immature occupation, Frank looked like a man-about-town — dapper, suave, haughty. He had on a pink striped shirt with black leather patches at the elbows. His black chinos clung tightly to the lower portion of his torso.

The reading teacher went over to Frank and acknowledged how hard it was for some pupils to find the right books. She said that she wanted to try some out with him. As soon as she asked him to read, Frank turned a bright crimson. The blood started rising in his neck and slowly reached his cheeks and forehead.

He stammered, "I can't read today 'cause my eyes are so blurry."

The reading specialist responded to Frank's agony. Instead of reading, she described the contents of several books she had brought. She asked him to choose one to read another day.

Later, she told his teacher about Frank's torment and how he sputtered and got red.

"You mean," the teacher answered slowly, "you mean—it's *that* painful for him?"

Together they considered why it must be such an ordeal. A boy who wants to appear strong, competent, and attractive cannot face the degredation of being such a poor reader. He has to avoid participating in classwork by pretending that he does not care. If one does not care, one need not try. If one does not try, one does not fail in front of a class. In this way, he could remain safe. Probably Frank settled for such a precarious solution rather than face the enormity of his problem. The pity of it was that, undoubtedly, he still could learn.

When the teacher guessed the deeper meaning of Frank's behavior, her annoyance subsided. Instead of taking personal offense at Frank's behavior, she realized his despair. She was willing to try anything to help him read. Slowly he reacted to her acceptance. Acceptance by the teacher alone, however, would not have been enough. He also was expected to learn—and so he did.

Finding the meaning behind behavior allowed this teacher to become more effective. Her willingness to seek assistance and to try again, led her to re-examine her pupils. She caught a glimpse of how they really felt and how they were covering up their frustrations. Defiance often disguised despair. Withdrawal sometimes meant resignation. As the teacher's understanding replaced resentment, her own frustration lessened. This brought forth fresh effort from pupils too. Some ventured forth timidly; some needed extensive encouragement, but the important beginning was made.

When teachers utilize behavior as a clue to youngsters' feelings, they gain a new perspective. With a new outlook, both teacher and pupils are freer to face their difficulties and continue the struggle forward. Each step means a chance for increased competency. Pupils may have limitations, but compassion and empathy evoke responsiveness and growth. When pupils have a chance to know and to grow, they start on the road toward their own fulfillment.

## C. SENIOR HIGH SCHOOL

### 1. Remedial Instruction in Comprehension

HELEN K. SMITH

COMPREHENSION is not a simple act in which a student simply grasps what he reads. Thorndike[1] and others have shown that reading a printed paragraph involves a very complex mental operation which includes selection, rejection, organization, and evaluation of the materials read in harmony with the reader's purpose. The foregoing activities are far different from those involved in reading to understand stated details.

The first important step in remediation of comprehension is the identification, through formal or informal testing, of the difficulties of the students. A teacher can then direct the instruction toward specific problems instead of teaching everything related to comprehension, thus saving instructional time. For example, testing may reveal that some students understand the meanings of sentences but not paragraphs, details but not inferences, social studies but not science, biography but not poetry.

In helping students improve in comprehension, the teacher should follow seven guiding principles. First, the literal skills should be taught before the nonliteral. Students must understand the stated ideas before they can understand broader meanings or subtle implications. Instruction is incomplete, however, if students are not taught when to infer meanings and when to accept the literal meaning.

Second, although research is not in agreement concerning the components of comprehension and has not determined a sequential order for teaching them, the need to provide practice in reading for varied purposes is evident in practical teaching situations. Through subjective analysis it appears that reading for details and reading for main ideas are basic to reading for other purposes: reading to understand sequential order; to follow directions; to make or to understand comparisons, generalizations, conclusions; to relate causes and effects to different situations; to anticipate outcomes; to be aware of mood or tone, and to distinguish between fact and opinion. The aforementioned purposes can be either literal or non-literal. Each purpose should be introduced and taught separately but later combined with others. Throughout the instructional period no one purpose should be stressed to the exclusion of others. For example, emphasis too often has been placed upon the reproduction of details instead of relating them to a larger context.

The materials, in the third place, should be interesting and challenging to the student and should be varied in length, style, subject matter, and type. Instruction should begin with short and easy materials and progress to longer and more difficult ones.

Fourth, students should have a purpose for reading and should be taught how to read for each purpose. Through careful assignments and suggestions from the teacher, they should know what they are to get from the selection, should see the importance of the skill being developed, and should use the degree of comprehension necessary for their purpose. They should also be taught how to set their own purposes.

Fifth, questions asked of students should be appropriate for their purpose. For example, if they have been asked to read for the general impression of a selection, they should not be held responsible for detailed information. The questions should not be just the short-answer type; some should permit the students to express their own ideas in their own ways.

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[1] Edward L. Thorndike, "Reading as Reasoning: A Study of Mistakes in Paragraph Reading," *The Journal of Educational Psychology,* VIII (June, 1917), pp. 323-329.

Questions should be neither so easy that they do not challenge the students nor so difficult that they are discouraging.

In the sixth place, oral discussions are necessary for the full development of comprehension. Errors made by students should be discussed with them so that they do not practice their mistakes. It is not enough for students to answer questions repeatedly and to mark them right or wrong from an answer key; they should be encouraged to determine why the answer was wrong and to uphold correct ones. Pupils should be urged to raise questions about things they do not understand. New ideas and concepts should also be discussed. Misconceptions are clarified, and interest in reading is fostered when pupils have ample opportunity to discuss, exchange, and use what they have read. Reading is then a meaningful, social activity.

Finally, reading activities are more meaningful if the teacher organizes them around general topics of interest, such as vocations or hobbies. Such a plan provides for a wide range of activity sustained long enough to permit interest to develop and flourish.

Thus, remedial instruction in comprehension should be carefully organized and planned in harmony with the needs of students. From such instruction many students will achieve success and interest in reading.

## 2. The Role of Personality Defenses in Reading

Jules C. Abrams

Reading has been defined as the "reconstruction of the facts behind the symbols." This definition points out very clearly that reading involves much more than simply the ability to recognize words; it also entails the ability of the reader to bring his experiences to the printed page and to interpret the symbols (that is, the words) in the light of these experiences. The process of visual perception is one in which stimuli are taken in by a complicated receiving system; this receiving system is structured by basic needs and interests of the organism modified by experiences long past and set by experiences of the recent past. Therefore, it is quite clear that in evaluating the process of reading comprehension (important at all levels, but particularly at the secondary school level), we must be concerned not only with the intellectual functions, but also with the emotional factors which facilitate or impede these functions.

In the attempt to understand the nature of personality disturbance and particularly how various emotional problems may bring about learning difficulty, the emphasis in psychology has shifted from the study of basic drives and strivings to how well the individual can handle his unconscious conflicts. In other words, the emphasis is now on the whole concept of ego defense. In the normal process of growing up each individual experiences, for realistic or unrealistic reasons, certain ideas and feelings which are unacceptable and threatening to him. He comes to anticipate that certain impulses, if given any opportunity for discharge, will get altogether out of hand. The pressure of these impulses and the prospect of discharging them stimulates reactions of anxiety. At later stages of development, other painful feelings, such as guilt, shame, and disgust, may also become connected with these rejected impulses. As a result, each individual must set up defenses in order to ward off the threat of his disturbing and unacceptable ideas and feelings. In brief, defense is understood to refer to any psychological operation that is intended to block discharge of threatening, rejected impulses and thereby to avoid the painful emotional consequences of such discharge.

In the normal process of development, the nature of the ego defenses employed by the individual—that is, their flexibility and adaptiveness—often play an important role in determining whether a learning problem will occur. For example, if too much of the mental energies is bound up in defenses—that is, in keeping disturbing impulses out of consciousness—then the student will have little left for the external learning situation. Experience has demonstrated that it is the individual's attention span—that is, his ability to attend effortlessly to the environment—that suffers first under the blows of anxiety and intense feelings. As long as he has defenses to cope with these impulses, however, that is, if his concentration is relatively well preserved, then he has the mental energies to replace the impaired free receptivity by voluntary effort, and he can learn. It is only when attention and concentration, both, are crippled—that is, when the defenses are severely threatened, that learning becomes nearly impossible.

The specific defense utilized by the individual also plays a paramount role in influencing learning, again particularly at the secondary school level. If the student has relied and is relying upon massive repression as his major defense, then he is necessarily placed in the position where it becomes exceedingly difficult for him to acquire facts and to accumulate knowledge in accordance with his intellectual potential. Knowledge cannot be assimilated unless it is assimilated with other freely available knowledge; and once repression plays a pathological role, it tends to become ever more extensive, and with it, the accumulation of knowledge is limited.

Other individuals utilize isolation as their major defense—they keep threatening ideas separated from one another or they keep their emotions rigidly repressed. In this manner, they stifle all fantasy and feeling. By denying their emotions and their creative urges, they deny the driving force within them with which they could implement their wishes and make them actions. Other students rely excessively on reaction formation—they not only repress a threatening impulse, but they change it into its opposite. If they unconsciously feel hostility, then, on a conscious level, everything is sweetness and light. These are the youngsters whose defenses free them from uncomfortable conscious anxiety, but whose defenses also make them passive, compliant, and inadequate. They are unable to differentiate between what is constructively aggressive or destructively aggressive, and they simply have to forbid any expression of aggressiveness whatsoever.

There are other defenses, of course, which do play an important role in learning ability. What cannot be emphasized too strongly is that all learning is affected by emotional factors as well as intellectual ones. What seems to be of most significance are the specific ego defenses, the unique means that each individual chooses to cope with his inner conflicts to allow him to function efficiently in the learning situation.

## 3. What Can We Do for the Disabled Reader in the Senior High School?

ESTHER FOXE

MANY FACTORS, some obvious, others not so obvious, must be considered in the initiation of a reading program at secondary level. Some factors are unique to a particular school but others are common to most school situations.

### 1. Needs

It is essential to ascertain the needs of the school, as these needs should set the purposes, goals, aims, and scope of the reading program. Therefore, the first step is to survey the needs stated by school personnel and the needs revealed by standardized tests, pupil records, conferences, and observations. Guided by a needs survey one can set a definition of "disabled reader" practicable to the particular situation. It may include only those of improvement potential who are reading below grade level, or may include also those reading above grade level but not up to their potential. The survey can guide decision upon emphases of the program—developmental, corrective, or remedial—and upon immediate as well as future goals.

### 2. Practical Considerations

Certain practical considerations affect considerably the character of programs it is possible to offer. Availability of particular students and personnel affect the possibilities of grouping students with similar needs and of comparable reading levels. Although scheduling problems may necessitate second-choice grouping, a paramount consideration is maintenance of consistent and intensive instruction—at least two, and preferably three, times per week—for students included.

Other considerations are availability of physical facilities, budget and materials; availability of test results and records; and size of school system in relation to functions of the reading staff.

### 3. Procedures

Smoothness and effectiveness of the program will be facilitated by establishment of procedures for:

a. referrals—It is helpful to establish a system for referral of students not discovered upon initial screening.

b. conferences — Although informal conferences with teachers are usually most effective, routinely-scheduled conferences anent pupil diagnoses and progress may hasten cooperation from staff members who might otherwise be slow to participate.

c. diagnosis — Decisions need to be made on the quantity and quality of diagnostic work to be done in relation to the time available. Standardized tests are invaluable for rough screening but more intensive diagnosis is advisable for students having remedial-type problems.

d. reports—Especially in a new program, periodic reports help the reading staff to check on needs and progress as well as to keep other school personnel informed. Excellent reporting times are at the completion of the initial survey of needs and when re-grouping is considered. Availability of secretarial help and administrative preferences affect the nature of reporting.

### 4. Work with Allied Fields

Essential to an effective program is establishment of free interchange between and reciprocal contributions by the reading staff and the health, guidance, speech therapy, and library personnel on elementary and secondary level. In addition, the reading staff can supply resources to nonprofessional groups such as the P.T.A.

### 5. Differences Between the New and the More-Established Reading Programs

New and established reading programs differ mainly in that new-program participants must *set* rather than *follow* precedents. Proceeding most carefully, they must ascertain what is wanted as well as what is needed in the reading area. Long-range goals may be set but it is usually wise to meet some of the immediate and pressing needs as well. The reading staff must inform other personnel as to the possible functions of reading specialists. Enlistment of the cooperation of other personnel should be sought in establishing criteria for admission of students to the special reading program as well as in planning other aspects of this program.

### 6. The School, Framework, Climate, and Philosophy

The reading specialists must thoroughly understand the school framework, climate, and philosophy, which the reading program must fit. Reading schedules must not conflict with other schedules in time or space allotment. School climate and philosophy affect what may be expected and what is desired from the reading program. For example, an autocratically-oriented school might expect a program that is narrow in scope, rigidly administered, and quite limited. To attempt more would be dangerous. On the other hand, a democratically-oriented school might be anxious for a broad reading program, be grateful for any help the reading specialist can give, and expect much hard work from him. An effective reading program must also be integrated with content-area programs, especially those in language arts. While one must move cautiously, and in consistency with school philosophy in a new program, he should not be so cautious as to accomplish little.

Thus, in a new program, one must assess (1) the *needs*—to set up the initial program, (2) the *available resources*—to make best use of them and to avoid duplication, and (3) the *school climate and philosophy*—to minimize conflicts, establish communication and rapport, set up workable procedures, and lay foundations for future expansion.

## D. COLLEGE

### 1. An Experimental Self-Diagnostic, Self-Corrective, Self-Evaluative College Reading Program

LEONARD S. BRAAM and
JOHN K. SHERK, JR.

TO HELP Syracuse University students to better meet individual needs for reading and study skill improvement, a modified approach was developed in teaching an already existing semester-length course designed for this purpose.

This approach attempted to minimize three problems experienced in working with students under the existing course structure. The need or weakness expressed by students was frequently found not to be the basic or prime need. The variety of problems or deficiencies represented by a group of students made it difficult to plan a course of study appropriate for each student. A pre-determined sequence of topics often considered last the topic for which some students expressed or showed the greatest need. Level of beginning achievement, instruction or practice time required to resolve satisfactorily problems or overcome deficiencies, varied greatly from student to student.

A more individualized approach was therefore considered necessary. To accomplish this a three phase approach to the problem, consisting of a program of self-diagnosis, self-correction, and self-evaluation, was outlined.

In the self-diagnostic phase the areas of reading, vocabulary, study skills, and certain personality characteristics were evaluated. From this information a diagnostic profile was constructed by each student for use in planning a program of self-correction.

To assist students in carrying out their self-corrective program, "packages" of materials were developed. These materials were developed in the areas of comprehension, speed of comprehension, vocabulary, and critical thinking. Small group instruction was also provided, as required, in the area of study skills. Each package was designed to permit the student to work with a maximum of independence and a minimum of instruction. The instructor's role thus was more that of a guide than a teacher.

Self-evaluation was discussed and stressed from the beginning of the course and encouraged throughout. A written self-evaluation following a prescribed outline was required at the middle and end of the semester.

No control groups were established to compare results statistically. Sufficient statistical data was available, however, to indicate that improvement of students in the experimental sections was equal to that of students participating in other sections of the course.

It was felt that this approach avoided setting group standards of performance; avoided judging improvement made by an individual against that made by others in the group; provided a framework within which students of differing skill and ability levels could function more freely; allowed individual interests and motivations to play a greater part in determining activities and outcomes; did not force students through the sequence of a prescribed program regardless of priority or degree of individual needs; and provided an opportunity for each student to take a significant step in the direction of independence by assuming responsibility for evaluating himself, planning and carrying out his own corrective program, and evaluating his own progress.

Although more demanding for the student and the instructor, this approach was considered to be more effective and satisfying than the group instructional approach previously followed.

### 2. Reading Diagnosis, a Dilemma?

BOYD B. JACKSON

MOST college and adult reading programs relate their major goals, either directly or indirectly, not only to the improvement of the reading process, but also to the general improvement of the personal adjustment of the individual.

On the other hand, these same reading programs only diagnose and attempt to correct the reading problem without regard to the individual's emotional status, which may be either the cause or the result of these same reading problems.

Discussions of the reasons for reading problems among college students and adults usually list the common diagnostic categories—strength of vocabulary, visual skills, reading speed, flexibility, and comprehension—and, in a few instances, make indirect reference to the existence of certain personality dimensions which, on occasion, handicap effective reading. To determine the existence of emotional problems and the impact these problems might have on reading efficiency, a study was made of 190 university students enrolled in voluntary reading improvement classes at the University of Illinois.

Each student was administered the *School and College Ability Test*, the *Cooperative Reading Test*, form 1A, and the *Minnesota Multiphasic Personality Inventory*. In addition, the complete record of any student who had had one or more interviews at the Student Counseling Service was available for evaluation, including psychologists' notes.

Of the original 190 students, 110 had had three or more interviews and ninety-two of these were found to be reading an average of 230 words-per-minute with sixty per cent comprehension. Using the criteria of low reading rate, low comprehension, and a record of three or more interviews, these ninety-two students were selected for further study.

Total scores on the SCAT for the selected group ranged from the fifth to the ninety-ninth percentile, with the mean score at the sixty-first percentile. The (L) linguistic scores ranged from the first to the ninety-ninth percentile, with the mean score at the seventy-third percentile. The (Q) quantitative scores were spread from the tenth to the ninety-ninth percentile, with a mean score at the fifty-second percentile.

The MMPI scores for this group were outside the normal range on at least one scale for sixty of the ninety-two subjects. Since the value of the MMPI as a clinical tool depends to a great extent upon its agreement with a clinical diagnosis, an effort was made to qualify the MMPI scores through the material found in the counselors' notes.

Among the sixty-one individuals in the counseled group with deviant MMPI scales, ten were noted by counselors to be withdrawn or depressive, forty-six evidenced some form of anxiety and compulsivity, seven manifested symptoms of mild to extreme defensiveness and hostility, two were considered borderline psychotics, with many minor combinations of these diagnostic criteria.

Therefore, with a counselor judgment and an MMPI profile indicating an emotional difficulty, it was noted that these students were manifesting both reading and emotional problems, and both problems were treated concurrently. The student was receiving both reading training and individual counseling.

A summary of the results of an eight weeks reading program, three hours of training each week, indicates that in the total group, those students who had higher quantitative scores than linguistic scores on the SCAT showed lower gains in reading improvement and the gain became lower as the difference between the Q and L scores increased.

Those students with manifestations of anxiety and compulsivity who were in counseling provided significantly better gain than the students who were not in counseling but who had similar deviant scores on the MMPI.

Individuals who were withdrawn or depressed and who were in counseling did not improve their reading skills significantly.

The hostile-defensive counseled group showed significant gains when compared to a slightly larger similar group which was not counseled.

The most gain was produced by that group which was defined as having minimal or no emotional difficulty; however, even in this group those who tended toward hypomania or had a near deviant score on the Mf. scale of the MMPI improved the most.

From this study we can only conclude that reading gains are a function of adult personality. Therefore, a reading program will not be as effective as possible for approximately forty per cent of its clientele if an adequate diagnosis and treatment of hampering personality deviations are not made.

The commonly accepted categories of reading diagnosis obviously leave a significant gap in the total diagnosis and treatment of the reading problem.

## 3. Clinical Aspects of Reading

SHIRLEY ULLMAN WEDEEN

IT HAS been my experience in working with clinical reading cases at Brooklyn College's Basic Skills Center that there is no one best format, teaching method, program, mechanical reading aid, reading text or workbook. Each student comes in for a different reason and is seeking different results.

We begin with generally accepted minimal criteria of speed, comprehension, and identified reading skills. We do not (nor to the best of my knowledge does anyone) have a profile of the "ideal" college reader. Every student reads at a different rate, then becomes more unique by reading different kinds of material at different rates. Add to this a variation in comprehension and, further, subdivide this by different comprehension levels in different fields. We soon find ourselves with a geometric progression. Continue this mounting individualization by including the numerous reading skills and gradations of ability.

How then can we possibly arrive at the "right" reading workbook? Since I believe there is no one best book to meet all of these possibilities, I would like to propose the following approach. There are many sound remedial reading books on the market. The first step is to identify the specific aim for any one particular lesson. Once this is done, the next step is to select the current appropriate material.

The following are categorizations I propose as a working criteria for the selection of college reading workbooks to be employed by reading clinics:

(A) Level (degree of difficulty of the material)
    1. Low Freshman
    2. Freshman
    3. Average
    4. Senior
(B) Emphasis (determined specific aim)
    1. Speed
    2. Comprehension
    3. Specific Skills
(C) Content (origins of selections in workbook)
    1. General Interest
    2. Literature
    3. Reading Improvement Instruction
    4. College Textbook
(D) Usability
    1. (necessary personnel)
        a. Self
        b. With Specialist
    2. (format for mechanical aids)
        a. Large
        b. Small
        c. Perforated

## 4. Beyond the Skills Program—Emotional Freedom to Read

BLANCHE L. SERWER

THE ABILITY to read on a college level has two basic facets—skill development and emotional freedom to learn.

Skill development is the generally accepted purpose of most college reading programs. The need to deal with emotional factors is less well recognized despite the published work of Hill,[1] Raygor,[2] Spache,[3] et al.

Experience in conducting a voluntary, non-credit tuition-free Reading and Study

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[1] Walker Hill. *Personality Traits and Reading Disability. A Critique.* In Eleventh Yearbook of the National Reading Conference, Emery P. Bliesmer and Ralph C. Staiger, Ed. National Reading Conference, Inc., Milwaukee, Wisconsin, 1962.

[2] Alton L. Raygor. *The Influence of Psychology on the Field of Reading.* In Tenth Yearbook of the National Reading Conference, Emery L. Bliesmer and Albert J. Kingston, Ed. National Reading Conference, Inc., Milwaukee, Wisconsin, 1961.

[3] George D. Spache. *Reading Improvement as a Counseling Procedure.* In Eighth Yearbook of National Reading Conference, Oscar S. Causey and William Eller, Ed. Texas Christian University Press, Fort Worth, Texas, 1959.

Skills Course at The City College of New York strongly supports the thesis that study problems are a manifestation of emotional difficulties. Students enrolling in the course state their problems in terms of inadequate skills, apparently unaware of underlying inner conflicts. Yet, in the individual conferences which have been an integral part of the course since its inception, personal problems have always come to the fore. The emergence of these problems has led to the conclusion that the students are asking for more than study help.

In order to serve the real needs of students, the reading course has been reorganized. The first part continues to serve the presenting problems, the skills needs. In the middle of the term, dynamic factors related to study are discussed. The last part of the course provides students with the opportunity for individual skill laboratory training and group counseling sessions. Counseling psychologists on the staff cooperate in implementing this part of the program.

The purpose of this paper is to present phenomenological material excerpted from tape-recordings in an effort to increase awareness of the importance of inner conflicts in reading and study problems. The feelings expressed by the students will, hopefully, provide some insight into the psychodynamics of study difficulties.

Helped by group interaction, students began to look behind the smoke screen of their presenting complaints. They became aware of four basic underlying problems: alienation, hostility, loneliness, and search for identity.

Matthew, for example, complained at first that his courses bore no relation to his personal life or his vocational aspirations, "Why must I study foreign languages if I want to be an engineer?" He described teachers as remote, the College as disinterested. Later, he said:

> I am not really part of the student body here. I live at the "Y"; they live at home. I'm different. The people I want to be with are the progressives, but they join peace groups and then act so competitively that they are warlike among themselves. I can't stand the folk singers because, in their enthusiasm, they substitute guitars for religion. I feel like a zombie on this campus. How can I do my work, how can I settle down to study, if I don't belong here?

Matthew felt alienated, uninvolved.

Hostility to school often reflected hostility to early authority figures.

To Harriet, academic failure was a means of striking out against her mother, toward whom she felt strongly resentful because of pressure to work hard. Essential to her survival as an individual was her need to perform according to her own personal standards.

> Even if I fail, I must do it my way, without any work, just to show my mother that it can be done without killing yourself. I know it's spiting myself, but it just has to be that way, or I'll bust.

Alice expressed the depth of her loneliness as it affected her school work:

> No matter what I do, I feel so alone. Instead of doing my assignments. I wander around restlessly, eating, telephoning.
>
> Last Friday night I had a good time at a "Y" dance. When I came home, I was more depressed than ever. I couldn't do a bit of work that week end, because I kept thinking I'd never have such a good time again.

Throughout the group discussions, the students appeared engrossed in a gigantic search for self, asking painful questions such as, "Have I the intelligence to see this thing through? How will I fit into the establishment-oriented society? Must I conform to succeed?" Hemmed in by societal and family pressures, students appeared to lack the freedom and energy necessary for effective learning. Inhibited against dynamic intellectual striving, they indulged in endless rumination about themselves.

Margaret's problem was that she regarded effort in studies as a test of her capacity and as a threat to her self-esteem. Deep-seated feelings of inferiority plagued her.

> I can't face the possibility of my own mediocrity. If I don't study at all, I can't possibly do well. This is less threatening to me. If I study and then don't succeed, I won't have an excuse for failure or poor performance.

The interaction of the group to the feelings of their peers was a dynamic source of help to each. The development of compassion, of interest in others, of understanding that they were not alone in their feelings of alienation, hostility, loneliness, and self-searching appeared to answer an emotional need which had shown its symptoms in ineffective reading and study.

# SEQUENCE VIII TEACHING READING TO THE DISADVANTAGED

## A. ELEMENTARY SCHOOL

### 1. Reading in a Compensatory Education Program

MILLARD H. BLACK

EDUCATORS are confronted by a variety of factors in seeking to assess the causes of cultural disadvantage: the value which the family and community place on education; the stability of the home and the security it provides in times of stress and failure; the types of communication patterns within the home. These and many more are present in every discussion of the education of the disadvantaged. Every urban school system is attempting to solve, in cooperation with other governmental and social agencies, the problems of cultural and educational disadvantage.

#### Experimental Procedures

Numerous experiments in educating the culturally or educationally disadvantaged are now being conducted in the Los Angeles City School District. These efforts are characterized, all or in part, by administrative provision making possible some of these experiments; instructional adaptations in specific classes; and in-service programs which support these experiments.

#### Administrative Provision

The first of two special programs which are now operational is entitled "The Compensatory Education Program in the Elementary Schools." Functioning in 79 of our 425 schools, it involves the use of one or two extra teachers in each school, who may be assigned to (1) reduce the pupil-teacher ratio in the primary grades; (2) establish a class to teach English to non-English speaking pupils; or (3) provide additional remedial reading classes in the particular school.

A second experiment, which has been described as "The Extended School Day Program," is being conducted in 28 schools. Involving instruction after the regular school day, this program provides help of two kinds: (1) a block of 20 hours per week of supplementary teaching time and (2) 12 hours per week of student aide time to assist the teachers. The student aides are locally recruited junior college students or high school seniors. This program is designed to increase the opportunity for the culturally disadvantaged child to succeed in school.

A third program now in the planning stage is known as "A School-Community Opportunity Project in Education." This projected study is related directly to the development of reading skills. It will include in-service education to familiarize teachers with the background and needs of pupils and to help them adapt and develop instructional techniques and materials. In addition, the experiment will introduce organizational changes which will provide pre-school programs to furnish developmental and school-readiness experiences for pupils of pre-kindergarten age; junior first-grade programs; ungraded primary classes for grades one, two, and three; class-size reduction; reading improvement programs for pupils who are either retarded or advanced in reading; a language improvement program to help reduce pupil use of excessive regional speech and ungrammatical speech; a program for the development of communication skills in the non-English speaking pupil; and extended school library facilities.[1]

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[1] Los Angeles City Schools, "A School-Community Opportunity Project in Education," 1963, pp. 8-16a.

### Instructional Adaptations

Many activities are being undertaken experimentally to develop reading skill and appreciation of literature among the culturally disadvantaged. Even the more novel of these are adaptations of familiar techniques. They include activities which involve:

*Remedial Reading*

*Developmental Reading*

- Semi-individualized reading
- Using a research program to stimulate reading
- Combining use of tape-recorder and reading textbooks
- Utilizing a basal reader approach, in which the use of an activity book and homework assignments are emphasized
- Presenting books reviews

*Use of Trade Books to Stimulate Oral Expression*

*Knowledge and Appreciation of Literature*

### In-Service Training

School personnel can develop understanding and positive attitudes toward their disadvantaged pupils and be motivated to assist them further through a study of the sociological and psychological characteristics of the residents in a particular community. For example, one group of Los Angeles elementary school administrators and teachers worked with a sociologist from a local university and with leaders in the Mexican-American community to improve the instructional program. Additional classes with enlarged content are being offered, and will continue to focus on the needs of Mexican-American pupils.

Two additional in-service training projects have been developed to assist the teacher of minority groups. One of these is a course designed to help in the teaching of English as a second language, using a linguist from a local state college as a leader. A second phase of this course will have as its goal the development of instructional material. A third type of in-service training course helps teachers to understand the role played by minority groups in the growth of the United States.

## 2. Utilizing Foreign Language Instruction Methods and Techniques in Teaching Reading to the Disadvantaged

WILLIAM TONEY POULOS

WHO ARE the disadvantaged or culturally-deprived children? What are the new methods and techniques developed in recent years under the National Defense Education Act? How can we employ these techniques and methods to improve instruction for the disadvantaged youngsters in our schools?

The disadvantaged or culturally-deprived children in these United States are those who have not been provided the quality of background, outlook, initial grounding, and readiness for formal learning that middle- and upper-class children have received.

Frank Riessman in the book titled *The Culturally-Deprived Child*[1] refers to these terms interchangeably: disadvantaged, culturally deprived, educationally deprived, underprivileged, lower socio- economic. He points out that by 1970 one of every two big-city children is expected to be "culturally deprived." Big-city children are not the only ones falling into this category, for in the South and Southwest we have many children who are also disadvantaged .

The disadvantaged children in the United States are comprised from the following groups:

1. The children of the Negro from the deep south and those living in the big cities
2. The children of Puerto Ricans in Manhattan, the Cubans in Florida and the Spanish-speaking Americans of the Southwest
3. The children of reservation Indians
4. The children of independent subsistence farmers, mainly native English-speaking of the Appalachian uplands.

Since the National Defense Education Act of 1958 was passed by the Senate and by the House and signed into Public Law 85-864, something over one billion dollars in Federal aid per year *has gone* into every level of education. One of the areas benefiting from the National Defense Education Act has been the field of foreign languages.

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[1] Frank Riessman, *The Culturally-Deprived*. New York: Harper Brothers, 1962.

The Commissioner of Education was authorized to make studies and surveys to find out exactly what the needs were in foreign language instruction. For example, what, besides proficiency in language itself, should be taught? What are the best ways of teaching a language? What materials do we need to develop? These questions are of vital importance to all of us who are endeavoring to teach the disadvantaged youngsters of our great land.

Not only are these children disadvantaged but they are also linguistic cripples, and we have no one to blame but ourselves for their great handicaps. For years we have been pushing these children into reading before they were actually ready to proceed.

By teaching the Spanish-speaking youngsters the elements of reading and writing in Spanish while they are learning to understand and speak English and while their English-speaking classmates are learning reading and writing in English and the elements of spoken Spanish, the majority of these young Americans could become literate bilinguals. We have for years neglected to take advantage of all of our resources. This same type of teaching could take place in New York City, Upper New York State, Florida, Louisiana, and in many other parts of the United States.

All of us will agree that children must be able to read to be successful in school, but so many of us have failed to recognize that the steps to reading are as follows: Listening, Speaking, Reading and Writing.

Linguistic science has also made great strides in recent years and each teacher of disadvantaged children should have an understanding of the basic rudiments of linguistics. The American English sound system and the manner in which the different organs of the mouth operate in creating these sounds should be well known.

Many of our problems in the teaching of reading to the disadvantaged arise from the mere fact that the youngsters have not been taught to speak English correctly and that they cannot hear their errors in the new language. This is not only so with the non-English-speaking youngsters but the same is true of the colored youngsters in our schools.

The teaching of oral language is of great importance and should be an integral part of the elementary school program. Teaching American English means practicing phrases and sentences until English word sound, word form, and word order become automatic. Oral mastery means that children can produce each pattern easily, accurately, and spontaneously.

The teacher should emphasize the intonation when the grammatical frame is first introduced. The teacher may help the pupils to hear and reproduce variances in pitch by directing his hand up and down as his voice rises and falls. The feeling for stress and rhythm can be aided by tapping out the rhythm on a drum or clapping his hands.

The sequence for teaching language is as follows:

1. Introduction of the content words along with objects and pictures illustrating situations, meaning, use and purposes
2. Teaching of basic dialogue involving a natural and exclusive use of aural-oral skills in a real situation
3. Supplementary vocabulary items which are closely related to words under study, utilizing relationships
4. Adaptation of the basic dialogue for the purpose of using words and patterns in personal situations
5. Structure drills designed to drill basic grammatical patterns. These are learned first through repetition drill, then through substitution drills, in which a word located in a certain place in the pattern may be changed without changing the essential structure of the sentence.

Thus far we have only discussed the problems which the disadvantaged non-English-speaking youngster deals with each day. The colored youngster has many of the same problems as well as a few more which are unique to him because of his misuse of the major articulatory organs.

When we provide an adequate and

proper education for the disadvantaged youngsters in our nation, we will have solved the greatest part of the drop-out problem which exists in our public schools today.

## 3. Tailoring the Reading Program to the Needs of Disadvantaged Pupils

CHARLOTTE MERGENTIME

### The Role of the School Volunteer

AT A TIME when the education scene is highly colored by the civil rights question, when teachers are searching for materials and procedures which are meaningful and stimulating to the educationally impoverished child, the community can be utilized as an invaluable resource.

A community project of lay participation, the School Volunteer Program, was organized eight years ago by the Public Education Association and is now a service of the New York City Board of Education. Other cities in many parts of the country have established similar programs.

The project is based primarily on the use of dependable, intelligent volunteers; men and women, who are trained to work with children in the schools. The volunteers report one or two days a week for a minimum of three hours a day and more than half the total number of volunteers offer children enriching experiences in art, music, and dance, or assist pupils in content subjects.

Since reading retardation is a nationwide problem, particularly among children living in overcrowded tenement areas, the school volunteers concentrate much of their effort in special reading programs. The emphasis in these problems is heavily weighted in the direction of providing experiences and skills that make for interested readers. Classroom techniques and texts are generally avoided and the results are highly gratifying.

At present we have over one hundred volunteers in reading help programs serving in eight elementary and five junior high schools. In addition to the volunteers who work in our regularly organized reading help programs, about one hundred and fifty men and women give reading help regularly under the supervision of the classroom teacher.

All the volunteers are carefully selected and interviewed. Those who signify an interest in working twice a week with children in reading are referred for special training. This takes the form of attendance at two basic training sessions where the volunteers are oriented to the background and needs of the urban child, in the context of seeing them as individuals rather than stereotypes. The volunteer attends four additional two-hour sessions which include observation of an experienced reading volunteer at work and observation of a demonstration lesson given by the staff reading specialist. A reading kit containing references and training material is distributed. The school volunteer is introduced to books, materials, and methods and is provided with some simple techniques designed to stimulate and motivate the non-readers.

After the assignment of a volunteer to a school, continued support and training are given. The volunteer is encouraged to maintain a relaxed attitude, to work at improving the self-image of the child, and to lead him into a pattern of learning.

Dramatic results which show a gain of three or more years in reading level during a six-month period can be cited, but much of the accomplishment, equally dramatic, cannot be measured by standardized tests. The potential school dropout who continues with his education, the truant who comes to school, the emotionally disturbed child who functions with less distress in the classroom, the "non-talker" who participates in discussion, the scores of boys and girls to whom books and reading now offer meaningful, exciting experiences are, though objectively non-measurable, positive results. Such results can in large part be attributed to the relationship which is established between one child working with one volunteer who is trying to meet the fundamental needs of this child.

A report from the volunteer chairman of a reading program unit in a school on New York's lower East Side illustrates well the spirit and philosophy of the School Volunteer Reading Help Program.[1]

> We now have mostly third graders. Although the children are young, they aren't a

bit shy; they come no matter what happens. We sit at our desks, willing strangers, and each child comes to us for forty minutes of reading help. Here there are no masses, no stereotypes, no problem children, only children with problems, many problems. Here there are not only reading problems but a full horizon of obstacles. One child sits like a ramrod, another is never still. We ask ourselves whether it is the desire to read that is missing or the lack of tools that hinder progress. Shall our approach be head-on or subtle? We often talk together between sessions or at the end of the morning in our constant search to find the right approach for each child. We know that success is not always measured by a reading score: Lucy, who always seems to be with us no matter what happens, sang out the other day that she thought we were going good this year. We all felt fine.

## 4. Limitations in the Vocabulary of Disadvantaged Children: a Cause of Poor Reading

J. ALLEN FIGUREL

PSYCHOLOGISTS tell us that one-third of the children from American schools live in "marginal" or "transitional" areas. Many terms have been used to designate these children: underprivileged, culturally disadvantaged, and culturally different.

Many of these children are retarded in reading. Retardation in reading prevents them from securing an adequate education.

Reading retardation has a complexity of causes. Nevertheless, one of the main reasons for such poor results in reading is the meagre experiential background children have had in developing an adequate vocabulary. The limitation in vocabulary prevents the culturally disadvantaged child from reading intelligently the many middle class words which are strange to him verbally and experientially. Language develops with the discovery of reality, and reality in those cases is very limited.

It need not be argued that a knowledge of the vocabulary of culturally disadvantaged children and the areas of experience they represent make a good starting point in the problem of improving the reading of large masses of city children.

How does the vocabulary of culturally disadvantaged children compare with the above figures? The following table gives the results of the study.

Table I

SIZE OF GRADE VOCABULARIES OF CULTURALLY DISADVANTAGED CHILDREN

| Grade | Number of Words |
|---|---|
| Two | 1,032 |
| Three | 609 |
| Four | 505 |
| Five | 654 |
| Six | 736 |
| All Grades | 3,536 |

Table II

COMPARISON OF THE VOCABULARY OF CULTURALLY DISADVANTAGED CHILDREN WITH THORNDIKE'S ESTIMATES

| Grade | Thorndike's Prediction | Vocabulary of Culturally Disadvantaged Children |
|---|---|---|
| Two | 3,600 | 1,032 |
| Three | 4,500 | 1,641 |
| Four | 5,400 | 2,146 |
| Five | 6,400 | 2,800 |
| Six | 7,500 | 3,536 |

A comparison was made of the vocabulary of culturally disadvantaged children with the standard basic word lists. The vocabulary was also analyzed to determine the nature of the words. Space does not permit giving the details here. An analysis of the areas of experience represented by the vocabulary was also made. Only in the areas of school experiences were culturally disadvantaged children comparable with others.

### Conclusions

The vocabulary of culturally disadvantaged children is comparatively small. They know approximately 3,500 words, the number that are known by many first and second grade children in higher socioeconomic groups. This meagre vocabulary places quite a limitation on their reading,

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[1] Claire Mirick, "The New York City Volunteer Program in Manhattan Elementary Schools," *School Volunteer News*, 7:4, February 1964.

for on the basis of the comparisons made in this investigation, culturally disadvantaged children know, on the average, only every second or third word found in their textbooks. Not knowing every second or third word is a serious handicap and one which precludes very much learning from reading.

A comparison of the words in the vocabulary of culturally disadvantaged children with the words in the controlled vocabulary for the middle grades shows that very little effective reading can be expected to be done in the textbooks in use in these grades, for almost all the words in the controlled vocabulary are unknown to culturally disadvantaged children in the various grades.

Less than half of the words in the vocabulary of pre-school children is known by second-grade children in slum areas. Nearly two hundred words in this list do not appear in any grade list of words known by culturally disadvantaged children. This suggests bringing into the activities of boys and girls who live in marginal areas experiences which are represented by the words which are not known.

Common name words, such as *sink*, *chimney*, *honey*, *beef* and *sandwich* are learned by culturally disadvantaged children one or two years later than by other children. Culturally disadvantaged children know proportionately more name words and fewer polysyllabic words than do those that live in privileged areas.

For the purpose of written communication, culturally disadvantaged children have a sufficient vocabulary, for they know almost all the words which make up ninety-five per cent or more of all the words used by an average person. This statement is substantiated by the fact that they know all except ninety-four words of Basic English.

The vocabularies of culturally disadvantaged children reveal a limited experiential background. Although the number of words known in such areas of experience as clothing, eating, housekeeping, and recreation seems large, the number is still very much limited when compared with the terms privileged children know. Only in the area of school experience are culturally disadvantaged children comparable to others. If reading competency is commensurate with one's experience, and much evidence seems to prove that this is true, culturally disadvantaged children, with their limited experiences, can be expected to do very little effective reading in textbooks they now use. To help these children read better, they must be helped to live better, and in this, the teacher has the world at her command.

## B. JUNIOR HIGH SCHOOL

### 1. Teaching Reading to the Disadvantaged—Junior High Mobilization for Youth Reading Program

MARILYN GIBBONS

MOBILIZATION FOR YOUTH is a broad-scale, comprehensive, experimental-demonstration program designed to attack the problem of juvenile delinquency. Its major premise is that no effort to prevent juvenile delinquency can succeed unless it provides young people with *genuine* opportunities to behave differently—through creative educational and exciting work programs.

Whereas in middle-class communities, reading retardation averages from 10-20 per cent of the school population, in the MFY area, as much as 80 per cent of the children are reading retardates. The consequences, of course, are limited educational, vocational, and economic opportunities which tend to perpetuate a vicious circle.

While service is an intrinsic part of the Junior High School Reading Clinic program, the major commitment is to translate its work and instruction into improved classroom practices and teaching.

The work of the JHS Reading Clinic is particularly critical because of the problems of the junior high school age group in this depressed area. The end of school years is in sight. The realities of whether they will be able to complete school successfully and obtain employment are pressing in on these children, and many are feeling pretty hopeless about the future.

The general orientation of the MYF Junior High School Reading Clinic is toward the pupil. The major aims and tasks are to re-motivate the children toward learning, to utilize materials of interest and pertinence to him, and to teach the skills he needs. During all of this, many aspects are examined—materials, skills, methods, techniques, and their relationships.

The JHS Reading Clinic opened last summer with a seven-week program for retarded readers from the local schools. Two hundred and forty children came voluntarily twice weekly for work in groups of four. One hundred and ninety-five of these pupils completed the entire program. A selected group of 40 pupils was re-tested with standardized reading tests. Reading gains ranged from —1.1 to +3.3. The median gain was +.9.

The first thing learned from this program was that the children were willing and able to avail themselves of clinic services.

This fall, with three remedial reading clinicians, a psychologist, and a psychiatric social worker on the staff, the clinic program was limited to 90 children in order to allow time for experimentation on a pilot study basis.

One program, which appears very promising, is the work of Mrs. Macomber. She devised a series of sequential lesson plans predicated upon the assumption that certain problem-solving techniques are common to all skill areas. Comprehension is *not* only a skill of reading. By working with problem-solving techniques, as illustrated by Jerome Bruner, first in isolation, then by teaching transfer, skills could be applied in whatever areas needed. Problem-solving techniques are studied first in game situations, such as Cuisiniere rods, dominoes, and chess.

In essence what was accomplished was to help these children define and clarify what the problem was, determine an appropriate mode of attack, arrive at the solution, and understand why the solution and the attack were correct.

Mrs. Macomber also designed and utilized a series of lessons devoted to word attack skills which were taught as programed lessons.

Initial results were promising. If after strict experimental evaluation this approach is shown to be a good one, there does not seem to be any reason why the same type of program cannot be used to teach other skills at varying levels of difficulty.

The second pilot study program conducted in the clinic is called STAR, "Supplementary Teaching Assistance in Reading." It was felt that parents could play a unique and important role in influencing a child's motivation toward learning. With guidance and professional training by clinic personnel, parents could become involved in their children's reading experiences. This could have broad implications for developing in the child positive attitudes toward learning and for reinforcing reading skills. To this end, parents were invited to attend a series of lessons, demonstrations, and discussion periods focused on the reading instruction their children were receiving. On the average, 25 per cent of the clinic families attended these meetings.

The only evaluation that can be made now is impressionistic since the statistical data are not complete. Many of the parents who attended expressed great interest in learning more about their children's problems and needs and at the final meeting spoke freely of the fact that they felt much more open-minded and understanding of their children and their difficulties. Many said this had resulted in a better home atmosphere. Several mentioned also that their children, who formerly never said a word about the clinic, became quite talkative and, sometimes, even willing to read with them once they had learned that the parent had met with his clinic teacher.

When these two programs have been evaluated it is expected that guidelines for future programs and projects can be drawn. This first year has been new and exciting and productive of many insights. The big job, that of putting these insights to work to evolve truly effective programs suitable for classroom use, remains to be done. The promise seems to exist.

## 2. Compensatory Reading Instruction for Disadvantaged Adolescents

GERTRUDE L. DOWNING

NO ONE who has not worked with culturally disadvantaged children can comprehend the extent of their edutional deficit. Since September 1961, three beginning teachers, with this writer as coordinator, have been teaching ninety youngsters in a junior high school in a lower socio-economic area of New York City. As members of the Queens College BRIDGE Project, we have studied the learning needs of these children and the professional needs of the teachers who instruct them.

### The Challenge

The seventh graders, with whom we began our work, had certain qualities in common. Their oral language development was largely restricted to monosyllables and incomplete sentences. Dialect impeded their fluency in speech and in reading. Insufficient experience outside their own segregated community handicapped their ability to conceptualize. The dehumanizing influences of poverty, with its correlates of broken homes, family mobility, and individual insecurity, had produced negative attitudes toward school in general and toward reading in particular. Even those children in the group who were relatively more fortunate had been traumatized by the cultural milieu in which they existed.

Although our pupils had many characteristics in common, they presented a wide range of abilities and achievement levels. A frequency distribution of grade equivalent scores on the *Metropolitan Reading Test* delineated an instructional challenge:

| Grade Equivalent Score | Number |
|---|---|
| Below 3 | 6 |
| 3 | 24 |
| 4 | 18 |
| 5 | 10 |
| 6 | 11 |
| 7 | 5 |
| 8 | 3 |
| 9 | 5 |
| 10 | 2 |

Most standardized reading tests with their time limits, with their esoteric vocabulary and content, with their unfamiliar directions, are manifestly inappropriate for the experientially deprived adolescent. Therefore, we relied upon continuous informal appraisal of pupil performance in the classroom for determination of instructional need.

### Some Aspects of Compensatory Instruction

Our first goal was to provide our pupils with successful reading experiences. To do this, we secured quantities of high interest, low difficulty materials both for content area instruction and for extensive reading. Most successful have been the narrative and biographical works, for the interests of these youngsters are strongly rooted in the immediate needs of daily living. Our second aim was the improvement of comprehension, and we have tried constantly to utilize every sensory pathway to concept development and to vocabulary building. We have taken many trips about the city with our pupils, family style. We have used pictures, films, filmstrips, recordings. Whenever possible, we have provided actual objects or substances for the youngsters to see and to handle. And we have labored to develop questioning to a fine art, never telling pupils what it is possible to elicit from them; never accepting literal understandings when it is possible to push on to interpretive ones. Our continuing purpose has been that of increasing the language fluency of our children.

### The Unique Elements of BRIDGE

Of course, none of these described activities is, in itself, particularly remarkable. What then, has made the BRIDGE program unique?

A most valuable element in our design has been the continuity of relationship between our three teachers and this group of children for the three year junior high school experience. This has provided an unparalleled opportunity for constant evaluation of pupil needs and for dynamic instruction adapted to those needs. A second asset, the team interrelationship between teachers and coordinator, has made possible an integrated program of reading skills instruction in the four major subject areas of English, social studies, science, and mathematics.

Finally, the pattern of long-term, cooperative supervision has provided opportunity for effective in-service training in the teaching of reading. This longitudinal experience has made it possible for the coordinator to demonstrate instructional techniques; to share classroom responsibilities through team teaching; to provide assistance in diagnosis and evaluation; and to aid in securing or in preparing appropriate instructional materials.

### The Outcomes

Our three years of work on BRIDGE ended in June. Our seventh graders have become ninth graders and the beginning teachers are now veterans. We can say with conviction that almost all of our pupils who are not impeded by reason of severe emotional disturbance or of strictly limited potential have shown marked improvement in classroom reading activities. We are hopeful, too, that our final reading test results will give quantitative evidence of our pupils' growth. Our faith in the BRIDGE approach has already been vindicated, however, for the mean increase in Verbal IQ, as measured by the Wechsler Intelligence Scale for Children, is significantly greater for our classes than for the control classes.

We have worked hard and we have learned much. May the knowledge we have gained contribute to providing more effective learning experiences for our disadvantaged children.

## 3. A Rationale for the Teaching of Reading to Disadvantaged Children

JUDITH BROWN

THE BROAD concept of reading as a thinking process must be an integral part of any plan to improve the skills of disadvantaged students in the areas of understanding and manipulating written language. The danger of accepting a too highly structured, categorized, and constricted view of the elements involved in the practice of reading is the greatest single deterrent to a realistic realization of a pupil-centered goal. The mechanics of word perception and word attack skills—comparatively easily presented in and of themselves—cannot be isolated from conceptual and psychic involvement and the devious relationships present in any teaching-learning situation.

Further, since reading is a cognitive process, each pupil's mental style or way of thinking must be explored and expanded rather than placidly being ignored or accepted and adapted to. We need to lean more heavily upon the strengths in a personality which have allowed it to survive in a limited environment rather than to decry the weaknesses it may have bred. In short, we need to make a massive instructional attack upon the reading possibilities of disadvantaged children based on their positive qualities of living and learning.

What are some of these positive factors with which we have to work? First, deprived children are not non-verbal per se.[1] Typically, they do not verbalize well in response to words alone but express themselves more readily when reacting to things they can see and do.

Second, the scores achieved by deprived children can be improved sharply by meaningfully directed practice offering special rewards.[2] With high motivation—or incentives, if you will—efficient test-taking techniques and good rapport with the examiner, the resulting performance can be improved.

Third, the following characteristics have been fairly generally determined to be largely typical of the deprived child's style of learning:

a. Physical and visual rather than aural
b. Problem-centered rather than abstract-centered
c. Inductive rather than deductive
d. Spatial rather than temporal[3]

Teaching tools and materials geared to these primary characteristics are available and ready for creative teacher usage.

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[1] Martin Deutsch. *Minority Groups and Class Status as Related to Social and Personality Factors in Scholastic Achievement.* New York: Monograph published by Society for Applied Anthropology, 1960.

[2] Ernest A. Haggard. "Social Status and Intelligence." *Genetic Psychology* Monographs, Vol. 49, 1954.

[3] Frank Riessman *The Culturally Deprived Child.* New York: Harpers, 1962.

Fourth, direct teaching can change attitude and self-concepts which will help students examine their own modes of thinking about themselves and others and offer them alternative approaches which will deploy more of their psychic energies from anxiety to learning.[4] Teachers and children often display self-defeating kinds of thinking which stand in the way of learning. What the teacher or child says to himself about a situation and not the situation itself causes a feeling of worthlessness which deeply influences aspiration and motivational levels, especially in the sensitive area of language.

The rationale for teaching reading to disadvantaged students of any grade level here presented is based essentially upon the real acceptance and actual use of positive, learning factors present in the individual's psychic organization. It is predicated upon the need for a pluralistic approach in education for all children of the republic and presumes that love, indeed, is not enough without respect and consistency. Above all it rests on the premise that the school, as an extended family and community situation, is peopled by teachers interested in, capable of, and willing to work with all of our children.

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[4] A. Ellis and R. Harper, *A Guide to Rational Living in an Irrational World.* Englewood Cliffs, New Jersey: Prentice Hall, 1961.

## C. SENIOR HIGH SCHOOL

### 1. Skills or Concepts in Second Language Reading

RALPH F. ROBINETT

A DISCUSSION of problems of second language reading as a part of a session centering on the culturally disadvantaged may seem highly relevant or it may seem somewhat tangential, depending on what is included or excluded in one's definition of culture. Without exploring very far the range of meanings assigned to the word *culture*, it soon becomes obvious that rightly or wrongly many of our children whose first language is other than English are considered to be culturally disadvantaged. The problems of such children are manifold. My concern here is, therefore, limited to an analysis of a narrow but fundamental range of problems related to bilingualism and the conflict of languages and alphabetic systems.

A problem commonly identified by remedial reading teachers as acute among the culturally disadvantaged is a poverty of vocabulary and a corresponding poverty of concepts. Though in many cases vocabulary and concepts may go hand in hand and the students may have neither the words nor the concepts, it is necessary to recognize that in many other cases the bilingual student may already have the concepts in his first language but not be able to verbalize them in English.

A second and closely related problem involves the way the non-native English speaker organizes experience in his first language and the conflict of this organization with the way the English language organizes the same or similar experiences. These differences at one extreme are reflected in what are often called false, or deceptive, cognates. In such cases the more common meanings do not overlap in the two languages.

At the other end of the problem of vocabulary correspondence is a variety of situations in which the common meanings of words in the two languages overlap in many cases, but do not overlap in many others. In such cases, the student is not necessarily confounded, but he is often confused. He has to puzzle out the meaning because of the differences in distribution between the meaning in his first language and that in English. At a very simple level, the Spanish speaking student may have to stop and reflect that the word *time* in *What time is it?* refers to the hour and not to the weather.

A third but less often recognized language problem stems from the degree to which a non-English-speaking student lacks automatic control of the grammatical structure of the English language. The student who is not quite sure if milk chocolate is a kind of milk or a kind of chocolate may not be struggling with concepts or vocabulary. He may have had milk for breakfast and chocolate for lunch. He may also know the words *milk* and *chocolate* in English. His problem in understanding the phrase *milk chocolate* may be a problem in English grammar based on his lack of understanding of how English expresses direction of modification.

From cases such as the one mentioned above at least three conclusions may be drawn: (1) the problem of concept development must be recognized as a problem which can be very different from that of vocabulary growth, (2) that words seldom mean the same thing in two languages, that is, the range of experiences covered by a word in one language seldom corresponds to the range of experiences covered by its "counterpart" in the other language, and (3) that lack of control of the signals of grammatical structure can present problems as serious as or even more serious than those which are more commonly attacked in remedial reading programs.

From these conclusions we may yet draw a fourth, namely, that the problems posed, though often handled by the reading teacher as reading problems, are not problems which intrinsically involve the printed page, but are really language problems. The reading teacher of non-English speaking students is in essence a language teacher.

To the extent that the remedial reading teacher is also a second language teacher, his effectiveness will be governed in large part by his grasp of second language learning problems and his effective use of second language teaching techniques. The professional literature in English as a second language is rich both in theory and in practical applications. My purpose here, however, is not to expound methodologies but rather to plead for a recognition on the part of the remedial reading teacher and his supervisors of the role such teachers need to assume when they are faced with large numbers of students whose control of English is limited by virtue of its being their second language.

Our experience thus far in regard to the reading abilities of native Spanish speaking students learning English has been consistent. From the primary grades into college, the student who can read in his vernacular can also, with a minimum of effort, learn to read in English within the limits of his control of the language and the cultural background of which English is a part. The relatively minor difficulties caused by interference of spelling systems which results in a student's reading *hot* for *hat* may disturb us and warrant our attention as teachers of pronunciation, but such mispronunciations rarely interfere with the student's comprehension of what he is reading if the material is a part of his linguistic equipment. Such a student is more of a language problem than a reading problem, and should be treated as such.

In addition to the multiple language problems the non-English speaking student brings to the remedial reading class a variety of problems which he may also have that intrinsically involve reading. These problems range in some cases from the simplest level of automatic response to the patterns of sounds and symbols, to automatic response to grammatical patterns as they appear on the printed page, and on to automatic response to the sequence signals which relate consecutive sentences within paragraphs.

As a final note on the problem of "poverty of concepts" among bilingual students, there seems to be an increasing recognition that the culturally disadvantaged student does not necessarily suffer from poverty of concepts. On the contrary, such children are found to have a wealth of experiences and concepts. The problem is in some cases that the experiences do not happen to correspond to those promoted by school curricula, even though they may conceivably be socially acceptable and could serve as a basis on which to build. As a nation we are only now beginning to break away from the unfortunate tradition of the melting pot in which rejection of one's past was a necessary first step in the Americanization process. We are beginning to assign positive values to the sub-cultures within our midst and to consider the possibility of adding to rather than eliminating the storehouse of experiences and concepts of the so-called culturally disadvantaged child. The remedial reading teacher, perhaps more than any other single member of the faculty, has an opportunity to help the "disadvantaged" bilingual youth to find dignity in his past and to lift the eyes hopefully to the future.

## 2. Teaching Reading to the Linguistically Disadvantaged at Senior High Level

MAMIE SIZEMORE

IT HAS BEEN estimated that twenty-five per cent of the school population of the United States is bilingual. By demanding the use of the English language, as the medium of instruction, American schools force upon a large number of children the problem of bilingualism. The melting pot of the United States indeed possesses many children entering school with little or no knowledge of English. Many observers and investigators conclude that childhood bilingualism, forced or voluntary, results in more disadvantages than advantages. The child tends to carry over habits from his mother tongue to the new language. Many times these variations do not tend to decrease with age or skill.

Your bilingual student poses his own special problems in the high school classroom. His problems are not the same as your English-speaking remedial student who is frequently either intellectually slow or lazy or unmotivated. Experienced teachers find, however, this much is true of some remedial and some linguistically disadvantaged students: both may have serious emotional barriers to self-expression. It will be found of certain bilingual students that they have not mastered the sound system of English. They may be fluent in a rather slangy brand of English, so fluent in fact that their proficiency in the substandard brand is a real barrier for them to overcome in speaking, reading, and writing when they get into high school.

Above all if they were exposed to reading before they spoke English fluently, their auditory discrimination is often poor. You will find that frequently the bilingual readers' syllable sense is very poorly developed. If they do not know the phonemes of the English language, it is hard for them to hear parts of words clearly. Figurative language loses much of its delights and subtleties in translation. Biblical and mythological allusions frequently mean nothing to them. How can they understand a piece of writing when they have missed possibly the general interpretation, and certainly the overtone of satire, indirect implications, and connotations?

Senior high school teachers must continue to sustain, and harmonize the learning of the communication skills in their logical order: hearing, speaking, reading and writing. They should offer a diversity in learning activities to hold the interest of their linguistically handicapped students and give them real help to overcome their language problems. Their many weaknesses—such as limited attention span, unwillingness to try because of repeated failures, limited speaking vocabulary and word attack skills—these all suggest the need for multiple approaches toward learning goals. Experienced teachers have found that their high school classrooms must become reading laboratories where students receive systematic and continued help in acquiring the fundamental skills of reading if they have not been achieved in the elementary school. More than the native English speaking students, the bilingual students need real experiences for the purpose of expanding their horizons of knowledge about the world in which we live. *To learn to read English they must speak the language.* To build concepts and add to their understanding of what they read, there must be plentiful discussion in English. Thoroughly mastering the basic signals of the new language is imperative but not sufficient. To really understand what they read, the cultural meaning problem must be attacked systematically.

## 3. Effect of Reading Instruction on Modification of Certain Attitudes

WILLIAM P. DORNEY

THE CLOSE relationship between reading retardation and delinquency has long been recognized. Many authorities in the field of reading and delinquency have accepted the factor of emotional maladjustment as a prime cause of reading disability. This pattern of thinking has resulted in many studies evaluating the effectiveness of all forms of therapy on the rehabilitation of delinquent children and the concomitant improvement in reading ability. Unfortunately, less attention has been paid to the other side of the issue, the aspect in which this study is primarily interested. That is, to what extent does reading instruction mitigate the maladjustment of the adolescent delinquent who is retarded in reading. This paper describes an experimental design that measures the effect of reading instruction on the modification of attitudes and behavior of a group of adolescent delinquents who were retarded in reading.

### Subjects

The 45 subjects employed in this study were selected from a population of adolescent delinquents who had been turned over by the Court of Special Sessions of the City of New York to the Youth Counsel Bureau for supervision and guidance. They comprised boys between ages of sixteen and twenty whose IQs ranged from 75 to 110. They were all retarded in reading and volunteered to receive instruction.

### Method and Procedure

These subjects were divided into three equal groups matched on the basis of age, IQ, reading ability, and length of probation. The groups were also equated for ethnic background. The groups were given either reading instruction, swimming instruction, or no treatment. The 15 subjects in the Reading Group were given 50 sessions of reading instruction at New York University. Each member of the group was given a reading test and a text based on the results of an informal book test by the investigator. They were also given a reading workbook that emphasized specific reading skills in the other academic areas. In order to negate any embarrassment that might result from the carrying of such as elementary book, each subject was provided with New York University book covers and a large portfolio with a New York University decal The reading lessons were based on the diagnostic findings of a standardized reading test, the informal book test, and the specific needs and intrests of the subjects. This involved such areas as reading want ads, menus, employment blanks, maps, telephone directories, and work-study skills as they related to the written examination for the various military services. Swimming instruction was given to one group at a New York City Park Department pool because of the following reasons:

1. Swimming instruction entails both individual and group work, as does reading instruction.
2. The subjects of the Swimming Group would have varying degrees of ability, as would the subjects of the Reading Group.
3. In the Swimming Group the motivation of the subjects to participate would be high.
4. The effect of the investigator's personality on the subjects receiving reading instruction would be equated with a similar effect on the subjects receiving swimming instruction.

The group that received no treatment acted as the Control Group. All subjects were evaluated according to changes in attitudes toward certain authority figures, improvement in behavior, and reading ability.

### Results

The results were separately organized according to the effects of the various forms of treatment on certain attitudes toward authority figures, behavior, and reading ability.

*The following results were obtained for changes in attitude toward authority figures:*

1. The order of improvement from greatest to least was reading instruction, control, and swimming instruction.

2. The magnitude of improvement was significantly greater in the Reading Group than in the other two groups. There were no significant differences between the Swimming Group and the Control Group.

*The following findings were obtained with regard to behavior:*

1. The order of improvement from greatest to least was reading instruction, swimming instruction, and control.
2. The magnitude of improvement was significantly better for the Reading Group when compared to the other two groups. The Control Group retrogressed to a significant degree when compared to the Swimming Group.

*The following findings were obtained with regard to a follow-up study of each subject's court involvement eighteen months after the termination of the experiment:*

1. The order of improvement from greatest to least was reading instruction, swimming instruction, and control.
2. The magnitude of improvement was significantly greater in the Reading Group than in the other two groups. The swimming Group was significantly better than the Control Group.

*The following findings were obtained with regard to reading ability:*

1. The order of improvement from greatest to least was reading instruction, control, and swimming instruction.
2. The magnitude of improvement was significantly greater in the Reading Group than in the other two groups; however, the Control Group was significantly better than the Swimming Group.

### Conclusions

It may be concluded that reading instruction is effective in modifying certain attitudes toward authority figures of adolescent delinquents. The differential effectiveness of reading instruction or swimming instruction appears to be significantly different; however, either is more effective than no treatment. The results of this study suggest that treatment of delinquents retarded in reading should emphasize reading instruction as a therapeutic instrument for rehabilitation. The positive modifications of certain attitudes toward authority figures and the concomitant improvement in behavior should emphasize the importance of reading instruction, not only for the various agencies that service these boys but also for the various school systems throughout the country that have to program for socially maladjusted youth.

## 4. Building Rapport with the Disadvantaged

EUGENE B. GRANT

IN RECENT YEARS great numbers of people have left the regions where they grew up and moved into the large urban areas. Although these people seek to better their way of life, they are immediately faced with a new set of conditions in a new environment which may soon be interpreted by them as unfriendly. If this movement continues at the present pace, it is estimated that by 1970 half the inhabitants of the large cities will be made up of people so disadvantaged that they will be unable to participate in the affairs of society.

As we think about a solution to this problem most of us turn our thoughts toward education. But in order to educate those who have now become alienated and resentful in this new environment, the schools, and the teacher in particular, face a tremendous and complicated task. The teacher must begin this task by trying to establish an all-important rapport between herself and her pupils. The establishment of rapport must be effected, first of all, by building mutual respect. But immediately the teacher is faced with the question of how to develop mutual respect.

In an attempt to develop mutual respect the teacher needs to have, early in the program, some estimate of the learner's capacity to do school-like tasks. The tasks that pupils are expected to perform must be commensurate with their capabilities. Traditionally, group intelligence tests have been used in an effort to measure this ability. These tests, however, are much less than satisfactory when they are used with the culturally disadvantaged. While individual mental tests may be much more satisfactory, they too seem to penalize those who are not in the middle class culture.

But, if mutual respect is to be gained the teacher must be alert to the harmful effects of requiring from her pupils either too little or too much. If she requires too little, the students learn that she does not regard them very highly as learners and they soon discredit themselves, thereby losing greatly needed confidence. If too many demands are made, students may develop a feeling of inferiority.

What are the alternatives to using an intelligence test as a means of appraising the capabilities of the disadvantaged?

There seems to be no good answer to this question, but it has been suggested that role playing be utilized in making judgments of potential. Children might be asked to act out the part of some familiar character or they might be asked to explain something of interest to them, such as the conversion of an old car to a "custom job." It is thought that by providing the disadvantaged with an opportunity to exploit their knowledge of certain topics and processes, or by allowing them to play certain roles, they will reveal their potential in a much more forceful fashion than is possible by the use of intelligence tests which are usually designed for middle class culture.

In building rapport it is also necessary for the teacher to understand her pupils and their difficulties with relationship to their home life. It is only through such understanding that she can hold sufficient respect for her pupils to allow her to teach them in an unpatronizing and uncondescending way. She must show sympathy and acceptance without emphasizing the weaknesses of her pupils. She must understand their way of life and must also understand the difficulties they experience in overcoming the negative aspects of their environment.

The teacher who is informal, straightforward, and down-to-earth will do much to develop good rapport, but the classroom should not be so conducted that it could be thought of as too permissive. These students want to know what the limits are and exactly what the tasks are. They like to follow a routine with clearly established and enforced rules. While they do not like a harsh dictatorship, they prefer a rather strict discipline—the kind they know best.

Finally, in building rapport, disadvantaged children need to engage in activities that will allow them to make use of their own experiential background. But as important as this is, they also need supplementary experience that may be provided by filmstrips, field trips, construction activities, and meaningful art activities.

In building rapport with the disadvantaged it is necessary that the teacher recognize the pupils' limitations and set tasks which they can perform; that she understand their way of life and the problems they face because of it; that the atmosphere of her classroom be friendly but not necessarily permissive. Finally, the materials she uses should be most appropriate for these children.

## D. ADULT

### 1. The Ladder of Literacy— A Concept in Adult Graded Reading Materials

ROBERT S. LAUBACH

HARDLY a day goes by without a letter reaching the writer requesting information about a book high in adult interest and low in reading level. The "low reading level" usually means extremely low—the equivalent of second or third grade, seldom above the fourth grade.

The adults for whom the books are sought are, some might say, "functionally illiterate." The writer prefers to call them adults of limited reading ability, whom he defines as "persons with some understanding of the reading process, but with less than five years of schooling; these persons may be reading from about grade 2.0 to 5.0."

The writer frequently refers to the adult "new literate," or "new reader," whom he defines as "a person whose childhood education failed to make of him a functional reader; he is now, or has recently been taking part in one of the nation's adult literacy programs."

Because of his concern for this new reader, and for those who teach him, the writer has organized a *New Readers Press*, dedicated to help adults as they climb from the abyss of illiteracy to the threshhold of functional literacy.

The concern of the writer for these new readers is shared by others. Witness what Howard McClusky, Charter President of the Adult Education Association, said before the U. S. Congress during the Adult Basic Education hearings:

> We need research in the development of new materials of instruction. You can't expect an adult to want to read or write about "Mary had a little lamb" when he can't read the directions on the machine he must operate to hold his job in a factory.

To test the ability to communicate to the new reader by specially written materials, the writer developed a study which became his doctoral dissertation under the guidance of Dr. William D. Sheldon, director of the Reading Center of Syracuse University and a past president of the International Reading Association. The study consisted of rewriting, according to specified readability and linguistic guidelines, newspaper articles, and testing for comprehension on two groups of new readers, one from Philadelphia and one from Cleveland. Statistical analysis indicated that communication was increased by the simplified versions of the articles.

The writer is developing functional materials for the new reader; guidelines for their writing will be shared upon request. These new materials are being integrated in a "Ladder of Literacy." The ladder is a series of books, carefully graded and prepared for content, which will lead the new literate to the threshold of functional literacy. The Ladder of Literacy, as conceived by the writer, performs at least five functions:

1. To provide elementary reading instruction for the adult.
2. To provide simplified functional books on subjects deemed important for the new reader, to help him increase his potential for a better job and ameliorate living conditions for himself and his family.
3. To increase reading ability while reading interesting and useful materials.
4. To stimulate his reading interests and habits so that he will persevere until he steps through and far beyond the threshold of functional literacy.
5. To provide, for the teacher and administrator of adult reading programs, a guide for the selection of materials of particular interest and appropriate reading level.

This concept is still evolving; a new bibliography sets forth the materials currently available. The writer invites suggestions and aid from other educators and authors.

# SEQUENCE IX
# DEVELOPING LIFETIME READING HABITS

## A. ELEMENTARY SCHOOL

### 1. Some Techniques for Building Lifetime Reading Habits

HELEN W. PAINTER

SOME YEARS ago Robert Frost wrote the well-known line: "The whole reason for going to school is to get the impression fixed for life that there is a book side to everything." Perhaps in this one sentence Frost has expressed succinctly the goal of teachers, for surely we are trying to promote lifetime reading habits on the part of all children. The past decade has seen a book explosion. Studies are indicating that children today *are* reading.

The topic of lifetime reading habits involves many aspects, four basic ones of which need mention before listing some techniques to use in developing such habits.

1. Reading ability is necessary to a reading habit. A child must read fairly well if he is to develop the habit of reading.

2. A child's attitudes and interests will influence his reading. Teachers must study the research on the interests of children. As books are matched to interests and needs, attitudes toward reading are influenced favorably.

3. Closely related to the foregoing is the matter of different social and reading environments. William S. Gray, speaking of the wide diversity among children reared in different environments, wrote that "we may rightly wonder if desirable reading interests and habits can be developed on the part of all."[1]

4. Are we as teachers somewhat prejudiced in our evaluation of the importance of lifetime reading habits? *We* are convinced of the value of reading. Not all people are. They have a greater interest in something other than books.

Following these four basic points, here are seven suggestions of techniques for teachers to use in promoting lifetime reading habits.

1. The teacher herself must read and let children know that she does. In the March 1964 *Reading Teacher* Ralph Brown points out that there is evidence that only teachers who themselves read can develop in students habits and interests conducive to wide reading. Our own interest in reading communicates itself to the child.

2. A teacher must know the field of children's literature. Otherwise, how can she suggest a book to that certain child with a particular need? How can she order books for her classroom library? How can she lead children to develop the habit of reading selectively? Teachers must be alert to the book lists available, to the magazines and newspapers reviewing current literature, and to the award books.

3. Read aloud to the children but read well. Good literature read by the teacher leads to interest in books. Poetry, especially, and some prose material seem to be better appreciated when read aloud by the teacher.

4. Make books readily available to the children. Surely teachers need to encourage the library habit. However, ownership of a favorite book is to be desired so that a child may turn to it again and again. Many books are expensive. Teachers must keep up-to-date with their knowledge of the many children's book clubs where an astonishingly large number of books of good literature is available.

5. Use a variety of audio-visual means

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[1] William S. Gray, "Sociological Aspects," in Helen M. Robinson, ed., *Developing Permanent Interest in Reading*, Supplementary Educational Monographs, No. 84, Chicago: University of Chicago Press, Dec. 1956, pp. 14-15.

to sell the idea of reading. Television, films, filmstrips, recordings, tapes, slides, and puppets are some of the sources available to the teacher who looks for them as aids to entice children to books.

6. Use pertinent facts about authors or their writing. Often we can lead to writers through interesting details about their lives, how they write, or episodes behind their books. Above all, teachers should seize the opportunity to hear these talented people. Your accounts of seeing and hearing authors may be just what is needed to lead the child to books.

7. Finally, we must empasize repeatedly the enjoyment of reading. Children must have books at or below their reading level to encourage them in wide reading. Sometimes, if a child is eager to do so, let him go on to a little harder material. Periodically, we must check on rate, skills, and the like. However, let us have other times when children just read.

In summary, the resourceful teacher devises her techniques for building lifetime reading habits in view of herself and of her individual pupils.

## 2. Children's Classics—Yesterday and Today

HELEN HUUS

WHILE it is difficult to draw a dividing line between "then" and "now," I have chosen the year 1930, chiefly because it marked the beginning of the "boom" in children's books. During the decade preceding, children's literature had been enriched by such landmarks as Carl Sandburg's *Rootabaga Stories*, Lofting's *Voyages of Dr. Dolittle*, and Wanda Gag's *Millions of Cats*. It was in this period, also, that *Winnie-the-Pooh*, that stuffed bear of little brain, was first introduced. Forty years later, these are already among the classics for children.

But it is the books that followed 1930 that will be mentioned here, for we have contemporary writing that will hold its own with the past when the total is viewed in perspective. I have chosen ten books for special mention, each from a different category. Choosing these was not easy, but here they are.

### 1. Picture Book

There is Fritz Eichenberg's zany *Ape in a Cape*, with its "dove in love," "goat in a boat," and "vulture with culture," but I did not choose it. Nor Dahlov Ipcar's *Brown Cow Farm*, or Marguerite de Angeli's big *Book of Nursery and Mother Goose Rhymes*. I *did* choose Bruno Munari's *ABC*, because it makes such a splash! The stark, white background of this oversize book forms a perfect contrast for the clear, large, simple pictures that look as if they might have been done by children with linoleum blocks. The big blue butterfly on a double-page spread and the large slice of pink, pink watermelon are striking indeed.

### 2. Fanciful Tale

*Alice in Wonderland* has set a standard, but C. S. Lewis' stories of the imaginary land of Narnia are not to be ignored. Too, there are *The Borrowers* by Mary Norton, peopled by that tiny Clock family, Pod, Homily, and daughter Arrietty, and the imaginative *Children of Green Knowe*, where young Tolly, who comes to spend his holidays with his great-grandmother, is introduced to the children in the family portraits and to their playthings in the attic.

In this category, however, I chose *Mary Poppins*, that British nurse who came in on the east wind and left on the west, who presents such an austere exterior, but who entertains the Banks children, her charges, with such unusual adventures as being suspended in air via laughing gas.

### 3. Realistic Story

*One Morning in Maine*, by Robert McCloskey, is as real as your own family, provided you live by the seaside. Sal literally loses her first tooth, and though she and her father hunt for it along the shore where they are clamming, they never do find it, which is for her one of the sad realities of life. The apparent respect, affection, and interest which adults, both in story and picture, evidence in their relations with the children show in the happy, well-adjusted children who accept and help each other.

### 4. Talking Animals

*The Tale of Peter Rabbit* in 1902 and

*Wind in the Willows* in 1908 showed what talking animal stories could be like, but contemporary tales like *Rabbit Hill* and the *Little Bear* series measure up.

However, it is *Charlotte's Web* that I would choose here, for it poses a real problem: how to keep Wilbur, the pig, from becoming bacon. It describes a plausible relationship between the animals and Fern, the little girl who understands what the animals say, and among the animals themselves—Wilbur, who wants a friend; Charlotte, the spider, who decides to spin *words* in her web in order to save Wilbur's life; and the rat villain, Templeton, who eventually reforms enough to be helpful, but only at a price.

### 5. A Girl As the Main Character

Here one could choose Laura of the *Little House in the Woods,* or migrant Janey of *Blue Willow,* or courageous eight-year-old Sarah Noble, or untamed Kate, who was gentled into a sensitive young lady by her uncle, *The Good Master.*

However, it is the Wisconsin tomboy of the 1860's, *Caddie Woodlawn,* that I would choose, for she embodies the essence of growing up—her childish, thoughtless pranks contrasted with her concern for others, described so vividly in her anxiety for the safety of Indian John. Not only does her real life story show some of the difficulties of pioneer life, but also gives it an exhilarating, exciting flavor that is often forgotten.

### 6. A Boy As the Main Character

I first considered loveable *Little Pear,* the mischievous Chinese boy, and bungling *Homer Price.* Then I looked again at Krumgold's two prize books, . . . *and Now Miguel* and *Onion John,* and at Emily Neville's recent Newbery Award *It's like this, Cat.*

But I discarded all of these in favor first of *Adam of the Road,* that happy-go-lucky minstrel's son, then finally settled on Henry of *Henry Reed, Inc.,* because he exemplifies so well the ingenuity and inventiveness, the sense of responsibility, and the unconcern for the impossible of a contemporary, well-adjusted, middle-class boy.

### 7. Other Lands

I thought first about *Madeline,* and then of Mafatu, the Polynesian boy who became brave in *Call It Courage.* I went on to the children of Shora, who wanted storks in their town and finally obtained *The Wheel on the School,* and to Momo, the little Tibetan girl who successfully found her stolen red-gold lhasa terrier, Pempa, in *Daughter of the Mountains.*

I finally decided on *Big Tiger and Christian,* by Fritz Muhlenweg, that lengthy tale of two boys, aged thirteen and twelve, respectively, who travel the breadth of Sinkiang province, just because they started out to fly a kite by standing in the box car of a troop train during one of the Chinese civil wars.

### 8. Animal Story

While *Misty of Chincoteague, My Friend Flicka,* and other horse stories are exciting and well-written, my choice here is *Lassie Come-Home,* for the love of a dog and the intelligence and perseverence with which he pursued his objective show the real "heart" of a dog so clearly and vividly. While the human characters are secondary, they do make difficult decisions that reflect their underlying moral sense.

### 9. Biography and Historical Fiction

Competing for honors in this category is the trilogy by Gerald Johnson subtitled "A History for Peter": *America is Born, America Grows Up,* and *America Moves Forward.* Another serious contender *George Washington's World,* the horizontal "slice of history" recorded and illustrated by Genevieve Foster.

But these were eliminated in favor of James Daugherty's *Abraham Lincoln,* a biography in cadenced prose, enhanced with sepia illustrations of strength and vigor. The dignity of the subject, the tone of the times, and the character of the man emerge from these pages, and the reader comes away with an increased understanding and awareness of the stature of this tragic figure.

### 10. Myth

In this last category, *Yankee Doodle Cousins,* by Anne Malcolmson, should be considered, for it gives an overview of the myth that is America. But it is Kate Seredy's story of her forebears, as told in

*The White Stag*, that I would choose, for she describes, in a style worthy of the subject, the wanderings of the Huns and Magyars for four generations until they reach their promised land of Hungary. She illustrates the myth with superb drawings that express the emotion and reinforce the dignity of the writing.

From this account of just a few of the superior children's books published since 1930, it is not difficult to conclude that there *are* books of today that can stand respectably beside the classics of yesterday; while not all those selected here are yet called "classic," only time will tell their ultimate destinies.

## B. JUNIOR HIGH SCHOOL

### 1. Developing Lifetime Reading Habits— A Continuous Process

MARGARET A. ROBINSON

"IF THE elementary school had a better developmental reading program," said a junior high school teacher, "the results of our leisure reading program would improve." With this statement we agree, and admit that the crucial reading experiences of the primary grades especially can lay the foundation for the reading habits of later life. However, the responsibility does not rest wholly in the elementary school but must be shared with the home, high school, and college, for the development of lifetime reading habits is a continuous process from early childhood through adolescence and into college years. Let us trace briefly this development.

An inexperienced teacher may expect that all preschool children will own story books and that parents will read and tell them stories. She may expect them to recognize many words and to value and appreciate books. In reality, it may not be so, for in some homes there is not a book or a paper and in others hundreds of books. The teacher, then, has to know her pupils and their basic needs in order to supply the experiences which will stimulate interests that can be satisfied through reading.

"Bookes give not wisdom where none
was before,
But where some is, there reading makes
it more."

(Sir John Harrington, Elizabethan epigrammatist)[1]

Let us tour a junior school briefly to observe the development of reading. Here in the kindergarten rooms are library corners of interesting books for browsing and many indications of incidental and informal reading. Here is a grade one class not ready for formal reading trying to bridge the gap from kindergarten to grade one. Around the room are evidences of many activities. There are lists, illustrations, and record charts about their trips. Obviously, the experience approach method is used and reading is taught informally from the charts. The expeditions, stories read, and lessons taught have given these pupils an incentive to make up their own stories which individually they dictate to their teacher. When they can dictate in sentences the teacher makes a book of each story. We see a pile of these illustrated, personalized reading books which the authors treasure and use in their reading parties. Will these pupils ever become lifetime readers? One wonders but knows that in this room there is a great love and enthusiasm for reading aroused because the children are reading their own stories based on their own interests. Here, also, reading skills such as main ideas, picture clues, sequence of ideas, and evaluation, are initiated.

Though there are many enterprises involving reading in each grade, basal readers are used for formal instruction to insure the continuous development of reading skills. Each class has from two to four reading groups with a certain amount of flexibility from group to group and room to room. Children are taught to set their own purposes for reading. After the silent reading there is much group discussion. When the pupils proceed to the next grade, they continue on their reading level.

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[1] Robertson Davies, "A Voice from the Attic": Alfred A. Knopf Inc., 1960.

Our school library is of inestimable value in the teaching of reading. All classes from kindergarten through six have weekly periods in the library and eight classes have longer periods for individualized instruction. We all realize that teaching skills is not enough, that the habit of reading is dependent also on the pupils' interests, the suitability and availability of the reading material, and the knowledge and enthusiasm of the teacher.

To aid us, teachers from kindergarten through high school answered three questions. A few typical answers follow:

1. What reading habits are you trying to develop in your room?
    a. Teach that books are a source of pleasure and information.
    b. Teach reading skills carefully in order that they may become habits. Teach major skills, vocabulary, comprehension, organization, location of information, etc., and their subskills.
    c. Teach pupil to read discriminately and to develop literary taste.
    d. Teach the importance of library membership.
2. How can you develop lifetime reading habits?
    a. Use children's interests as springboards into reading.
    b. Appreciate and enjoy children's literature.
    c. Group children according to needs, abilities and interests. Teach individuals too.
    d. Make the lesson enjoyable, alive and vivid by class discussion, acting, illustrating, etc.
3. How might a teacher prevent, inadvertently, a pupil from acquiring lifetime reading habits?
    a. Teacher lacks enthusiasm.
    b. Teacher lacks knowledge of children's literature. Teacher is not a reader.
    c. Teacher does not know the skills nor how to teach them.
    d. Lessons are lifeless, careless, unplanned. Appraisal and evaluation are neglected.

Thus the elementary school strives to lay the foundation for developing lifetime reading habits and the high schools and colleges take up the challenge. Our united goal is to develop a wide, permanent carry-over interest in reading to adulthood, despite the strong competition of radio, television, and movies. Hand in hand with the development of permanent interest must go the development of literary taste. Hence, we must develop discriminating readers, people who (Robertson Davies says)[2] "read for pleasure, but not for idleness, who read for pastime but not to kill time, who love books, but do not live by books." We should demonstrate the personal value books can have for each student and show him that books can open wonderful new worlds for him.

## 2. Can Book Reading Be Made a Habit?

WILLIAM D. BOUTWELL

BOOKS get off to a good start with children. Except for television, books usually are the first form of communication other than the spoken word that a child meets in life. He meets books under the best possible circumstances. The persons he trusts most—his father and mother—introduce the child to books. Reading books is no ordinary experience for children. It is a cherished rite—an homage to the printed page and illustrations—that takes place regularly in millions of homes.

If books get off to such a good start why do they lose out later to television, newspapers, magazines, and perhaps other forms of mass communication? Why does early love of books turn so often into indifference and even hostility?

I will present some current practices and some factors that seem to me to deter reading as a lifetime habit. Then I will turn to practices and factors which can and do work to make books friends for life.

First, the deterrents:

1. The current use of books as major tools in the education process blights the image of books in the child's mind. Learning is hard work. Textbooks, no matter how gaily illustrated, are not designed for pleasure reading. In the early elementary school the child finds in prefabricated Dick and Jane readers none of the excitement he enjoyed in books read to him by his parents. As he reaches junior high school he finds himself burdened by a stock of books. They weigh so much that they can no longer be carried on the hip; they must be carried with two hands on the stomach. One parent found that his daughter was toting fifteen pounds of

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[2] Robertson Davies. *op cit.*

books back and forth to school every day. How much would you like television if you had to carry the set around every day?

At a recent convention of audio-visual specialists one speaker called the book an "archaic method or storing and permitting the retrieval of knowledge." Your first reaction may be to resent this charge. On second thought you may welcome it. Education has blackened the good reputation of the book. Ever since Gutenberg, the book has been a slave doing all the dirty and dreary work of education. We have a phrase for it—"hit the books." What booklover would not be cheered to have this grim cry banished from the land! Let us welcome the offer of films, filmstrips, television, microfilms, and all the new hardware to take over the hard work of education. Let them take the drudgery and lumps. Let us take joy in the prospect that books can be freed from bondage to education and that youth can turn to books for pleasure.

2. Reading deterrent number two is bad packaging. The value of attractive packaging stares out at us from the shelves of every supermarket and every drugstore. Of course trade books come out with bright, appealing wrappers. But what a disappointment when the wrapper comes off! And what further discouragement when the book is packaged in library bindings. There they stand in serried ranks on library shelves—dusty red or dingy green—repelling young readers. Look at the contrast with the inviting paperbacks. A San Francisco teacher pointed to her classroom library of hard cover books and said, "Look at them. I can't get the children to read them. They love the same books in paperback." Industry has learned how to package its product for appeal. Better packaging can make books more attractive.

3. Deterrent number three is *book reports*. Many a child has been lost to book reading because he had to write book reports. Fortunately teachers are learning that book reports win more groans than gains. They have discovered that youngsters like to do what their elders do when they read books; they like to discuss them rather than write reports on them.

4. Deterrent number four is class study of *the* classic. This practice is defensible. The inner meanings and subtleties of great books will be missed unless brought to light through study and discussion. Nevertheless, classroom study of *Silas Marner* and other oldtimers has led many a child to give up books for life. As adults we would feel much put upon if we were members of a group asked to read the same book—especially a book written for another audience living in another country in another era and practically in another language.

One cannot deny that profound concepts lie within great books. Nor can one deny that these ideas should be part of one's heritage. There are ways of getting these key ideas without killing interest. One of the best ways has long been recommended by English education leaders. It is the way of the theme unit.

5. The fifth deterrent is non-ownership of books. Few can now say, "These are my textbooks." The books belong to the Board of Education, or the Library. The child who does not buy books does not experience the pride of possession. A study of parents showed that they were nearly unanimous in the opinion that a child is more likely to read a book if he himself buys it. There is little likelihood that we will turn our backs on free textbooks. Nevertheless, some school systems are resolved to make it as easy to buy a book as to buy lunch.

What can be done to push away the road blocks to book reading as a lifetime avocation? Here are some programs for action:

1. *Encourage the American Library Association to push ahead with its proposed study of factors that influence a person to become a book reader—or non-reader.*

2. *Encourage more pilot experiments with paperbacks like that going forward in New Jersey.*

3. *Accept the belief that satisfaction and pleasure with books in the formative years can lead to lifetime reading.*

*Pleasure* in book reading is more important than the content in particular books. Can our teachers become "salesmen" of books?

4. *Ownership of books encourages reading and stimulates youth to begin building their own libraries.*

5. *Accept the ladder theory of developing taste in books.*

The corollary of this is: Don't worry too much what youngsters read so long as they read. The youngster who for a time reads nothing but sports will grow out of it. Girls will grow out of Kay Tracy and horse fiction.

6. *Remember that the books that pleased one generation will definitely not please succeeding generations.*

7. *Introduce courses in children's literature in every teacher education institution, so that teachers will know what is inside the covers.*

8. *Increase traveling exhibits of new books and in-service provisions to encourage teachers to discover and read new children's books.*

9. *Encourage promotion of reading as a joint project for teachers, librarians, and parents.*

The child who reads well usually comes from a home where he has been read to and where parents read.

## 3. Research in Reading Habits and Interests at the Junior High School Level

DORIS V. GUNDERSON

OUR TOPIC is the development of reading habits in the junior high school. We have relatively little information from research to tell us how to encourage reading habits. Surveys tell us that we are not a nation of book readers, yet we have almost unlimited books, magazines, and newspapers available and accessible. Surely a well-developed reading habit is a valuable asset to an individual, as it leads him to independence of thought and action. Obviously, the establishment of reading habits should begin in the early years of elementary school with a sustained effort to continue such throughout the child's school career.

That our students have not developed a reading habit is evident in some interesting and rather frightening statistics from Project Talent, a project conducted at the University of Pittsburgh and supported by funds from the Cooperative Research Program of the U. S. Office of Education. One phase of Project Talent is a study of 15-year-olds. Of the total population of 1,619,700 students in 987 schools 944,300 were in grade ten or above, 558,400 in grade nine, 71,400 in grade eight, 13,100 in grade seven, and 2,500 students in grade six or below. Analysis of the data revealed that there "appears to be little relation between number of books reported to have been read and grade placement of the 15-year-olds. The girls, particularly those in high school, report reading more books than do the boys. But the modal response for both boys and girls is still only one to five books per year. This is true at all grade levels."

Such statistics should cause us to wonder what is wrong with us in our work with students; why do they read so few books? If we temporarily overlook the percentage of retarded readers, the figures still leave much to be desired.

The importance of research in the area of reading interests is stated:[1]

> On the assumption that interests are a primary source of pupil motivation, research on reading interests has had significant implications for teaching methods, especially in suggesting points at which instruction should begin in the literature class. While some teachers have regarded interest patterns as the major criterion for determining content and teaching procedures, it also seems necessary that the goals of the teacher be focused on the development of new interests. Estimates of the effectiveness of teaching in improving reading interests have used categories such as the following:
>
> (1) increase in the amount of reading
> (2) variety of subjects read about, or literary types
> (3) maturity of books read

Witty states that surprisingly few comprehensive studies of children's interests are available.[2] Relatively few studies have been reported, particularly at the junior high school level.

Stanchfield reported a study made of boys' reading interests as revealed through personal conferences. The population consisted of boys in grades four, six, and eight—51 boys at each grade level in the Los Angeles City Schools. The investigator found a similarity among the preferences of the three grades by reading interests and reading ability. The category most preferred of the fifty investigated was that of outdoor life. Second and third choices were explorations and expeditions, and sports and games. Characteristics of reading interests were also explored. Again Stanchfield found a similarity of preferences of grade levels.[3]

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[1] Henry C. Meckel. "Research on Teaching Composition and Literature," *Handbook on Research on Teaching*, N. L. Gage, Editor, Chicago: Rand, McNally and Company, 1963, pp. 966-1006.

[2] Paul A. Witty, "The Role of Interest," *Development in and Through Reading*, Sixtieth Yearbook of the National Society for the Study of Education, Part I, Chicago: University of Chicago Press, 1961, pp. 127-143.

Shores has reported results of studies[4] dealing with interests of junior and senior high school students, comparing them with results of similar studies made with elementary school populations. A similar classification scheme and methodology used in four studies indicated a "remarkable degree of consistency of reading interests through the grades from 4 to 12." In each of the studies mystery, followed by adventure, was the most prominent reading interest. On the basis of the returns a three place classification scheme was devised. Fourteen major categories were selected to contain the responses; these were Literature, Social Science, Science, Personal and Social Adjustment, Recreation and Hobbies, Vocations, the Arts, Religion, Psychology, Mathematics, Philosophy, Language Arts, Money, Economics and Banking, and Schools. Teachers also were questioned and gave their judgments of what students would read about, ask about, or look up. Neither junior nor senior high school teachers' reports of students' reading interests were as close to the students' own choices as were those of elementary school teachers. High school teachers' choices in literature were similar to those of students, except that teachers underestimated the strong interest in mystery stories. Teachers also seriously underestimated reading interest in the social studies. Shores felt that the tendency of high school teachers to see students' interests in terms of their own field of specialization accounted for some of the discrepancy between their reports of student interests and the students' reports.

Soares reported a study[5] concerned with reading interests of junior high school students; the purpose was to determine whether short stories, rated high in interest by junior high school students, contained elements which did not appeal equally to all students when grouped on the basis of intellectual ability, grade level, or sex. The investigator found some general results: the narrative type of story told by an omniscient author who stressed the theme of bravery and cowardice rather than plot or character was preferred by all groups. The favorite story was realistic and contemporary, most frequently about animals, sports, or teen-age problems. The most interesting story stressed physical action and contained one main character who was a very attractive teen-age boy of unknown status; it was written in a clear style with a single unifying effect.

A number of articles dealing with reading interests appears in journals, but few of them would qualify as research if appropriate criteria are used as a basis for judgment.

In an article in *Every Week*, a publication for secondary school students, novelist Richard McKenna answered the question, "How can one develop an interest in reading?" with this statement: "Interest in reading is simply a special form of a more general interest in being alive and experiencing the world around us." He goes on to state that when one reads, a kind of vicarious, symbolic experiencing of the world occurs which breaks through the time and space barriers which limit experience of the flesh. The barrier is broken by the power of the creative imagination, one of the specifically human qualities setting man apart from other animals. McKenna's advice to the student who lacks an interest in reading, yet realizes the importance of it, is a reiteration familiar to most of us. Reading itself takes precedence over the quality of what is read: McKenna advises students to sample everything in a library until a book is found which will arouse sufficient interest that the entire book is read. The student who searches only for pleasure and entertainment and forgets about duty ultimately will find a book which will take hold of him. In "Reading: The Door Which is Never Shut," from *Every Week*, McKenna says:

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[3] Jo M. Stanchfield, "Boys' Reading Interests as Revealed Through Personal Conferences," *The Reading Teacher*, 16: 41-44. Sept., 1962.

[4] J. Harlan Shores, "Reading Interests and Informational Needs of High School Students," *The Reading Teacher*, 17:536-544. April, 1964.

[5] Anthony T. Soares, "Salient Elements of Recreational Reading of Junior High School Students," *Elementary English*, 40:843-845, December, 1963.

> The next such book will be easier to find and before long you will have the habit of reading, which is what is most important. Make the whole world of ideas your field. Regard each new idea you meet with friendly or hostile interest, but never with indifference. Whenever you turn your back on an idea, you close a door in your mind and you may never again get it open.

This would appear to be a good starting place; however, we must attempt to build, extend, and expand these interests if we are to achieve our goal of turning out educated individuals who are thinking citizens, reading not only widely, but also wisely and well.

## 4. What We Read—and Why

MARIE CLARK

MOST ADULTS who read widely got their first taste of books from parents who read to them at an early age. When they entered school, they already knew about the treasures hidden between the covers of books and have never forsaken the search and are still reveling in facts "stranger than fiction." They remember the picture books, the nursery rhymes, the dialect stories, the humorous ones, the adventures of people and of animals, and the Bible stories. Much of the remembered reading was done in school—the James Fenimore Cooper stories, *The Tale of Two Cities, The Three Musketeers, The House of Seven Gables, Robinson Crusoe, The Swiss Family Robinson, Treasure Island,* and *Silas Marner.* If movies and TV have influenced these people, it has not been to detract from reading but to send them to the library to find a much loved volume or to seek a new one.

What can the junior high teacher do to promote lifetime habits of reading? Adolescents are a tribe unto themselves—emotionally, physically, and intellectually immature. The teacher must understand this difficult transition period, accept pupils where they are, and guide them wisely. If a child comes to you still reading comic books, show an interest in what he is doing, lest you lose a potential reader. If he lives with the Hardy boys—as his father did with Tom Swift—give him a volume he has not read, and then more quickly will he read something else you suggest. If the girls are thrilling with Nancy Drew, use the same approach.

Teachers must build up proper concepts. The boy who thought *haircut* when the word *burr* appeared, had not had the experience of rising early to meet the circus train to get a job working with the animals for a free ticket to the big top. History and literature are so interwoven that they cannot easily be separated. What pupil can appreciate *Ivanhoe* who does not know something of the social structure of the Middle Ages? Nor can he understand any better *The Tale of Two Cities* until he knows something of the full import of the French Revolution.

What should teachers have junior high pupils read? First of all, whatever it is, let it be for enjoyment. There is no reason why the learning process cannot be a pleasure instead of drudgery. Let them learn of the past. Then when they find in Poe's "To Helen,"

> The glory that was Greece
> And the grandeur that was Rome,

it will take on a more significant meaning. Teach them the classic myths, and they will see for themselves that the problems with which man is wrestling today have been the problems of the ages. They will see the reason for some of our modern nomenclature, Project Mercury and Project Gemini.

Our land is teeming with legend and folklore, and through books pupils learn of the past, of the people who pioneered. History and biography cannot be severed, and authors have been generous in providing materials for every period in our national life as well as for cultures around the globe.

In an era when emphasis is placed on science, junior high pupils chuckle at the many superstitions that once prevailed. It is tantalizing to realize that before the invention of the microscope man did not know about bacteria that caused the plagues from which they are free—yellow fever, diphtheria, typhoid, rabies, and polio. They have all had penicillin shots and have had the broken arm X-rayed, but they do not know about the people behind these wonders.

Let them learn about the natural world in which they live. Soon without your telling them they will discover the law of "the survival of the fittest." Too they will find that the natural universe has influenced the activities of man.

No alert teacher will overlook the opportunity to teach good character traits. It is surprising how many junior high pupils have not read *The Wind and the Willows*, *Charlotte's Web*, and *The Incredible Journey*, where companionship and friendship are exemplified. Courage is not taught directly, but a pupil will find it in *Call It Courage* or *Island of the Blue Dolphins*.

One of the chief problems confronting the junior high pupil is that of growing up. Particularly for the girls there is no better choice than *Diary of a Young Girl, Anne Frank*. For boys who like to read of other cultures as well as to confront the fact of growing from boyhood into manhood, suggest *And Now—Miguel*. The underprivileged girl takes a new lease on life when she reads *Blue Willow*, in which Janey always had something to cling to in the face of ever-present, insurmountable barriers. *Pita*, *The House Under the Hill*, and *Strawberry Girl* have a strong appeal for these same girls.

Today, probably more than ever before, we are faced with the problem of tolerance, particularly relating to one of our national and international prejudices, the racial struggle. To acquaint pupils with the many facets of this conflict, *Ramona*, *Great Day in the Morning*, *Shuttered Windows*, *Willow Hill*, *The Moved Outers*, and *To Kill a Mocking Bird* are a few stories that will help them see the other fellow's viewpoint.

Books help solve personal problems. No teacher can tell a girl that she is too fat, but she can suggest *In a Mirror*. *Of Human Bondage* has long been a favorite with high school boys and girls as well as adults, for they identify themselves with Philip and his sensitivity about his club foot.

For whatever reason junior high pupils read, they should see that it is through good stories they can gain a mastery of their own language rather than through vocabulary lists and textbooks on grammar and rhetoric. Along the way there should be many paths that lead them into an understanding and appreciation of poetry. Do not tear a poem to pieces and try to put it back together as you would a shattered piece of precious Dresden, but let its beauty speak for itself. The pupil who has felt the pangs of homesickness listens attentively when Henry van Dyke says, "So it's home again, and home again, America for me!"

Bits of information behind a poem enhance the understanding and do not detract from its sheer beauty. Pupils delight in knowing that the "We" in "The Runaway" are two notable poets, Robert Frost himself and Louis Untermeyer, who had the experience described in the poem.

It is the duty of the junior high teacher to give pupils a broad view of the multiple vistas on the horizon and let them find for themselves, under careful guidance, a basis for discrimination between what is just another book and books that teem with excellence. Introduce them to stories by authors "that had something to say and not that they had to say something." Let them know that you are a reading teacher and not just a teacher of reading. Let the pupils enjoy every moment of their reading experience, but do not stop there. Let them find the implications for themselves. If problems are involved—personal, civic, national, or international—inspire your pupils to act, rather than to sit idly by, for the youth in your class are the legislators and executives of the next generation.

## C. SENIOR HIGH SCHOOL

### 1. Some Interests of High School Boys and Girls

PAUL WITTY

THE DEVELOPMENT of a lasting interest in reading should be a concern of all citizens since it is generally conceded that effective participation in democratic life requires efficient and wide reading. Regrettably, however, it has been found that the average adult uses but very little of his actual capacity for rapid silent reading.

There are many factors which contribute to the relatively small amount of reading carried on by adults. It is obvious, of course, that poor reading habits alone do not account entirely or even largely for the above condition. For it has been shown that many adults do not have ready access to public libraries.

Closely associated with the problem of availability of books is interest in reading. Many schools are attempting to develop a more lasting interest in reading among students generally by establishing elementary school libraries and by extending secondary school library facilities. There is also a growing tendency to initiate developmental reading programs designed to satisfy interests and fulfill needs.

In the cultivation of interest in reading, the importance of assuring the development of effective, flexible skills can scarcely be overestimated. For the satisfaction of interests and the fulfillment of needs through reading cannot be realized fully unless the pupil is skilled in reading. To become effective readers pupils need to enjoy the act of reading and the results. They will probably enjoy the act through the acquisition of reading skills which can be applied readily in various situations. And the results of reading will be appreciated when reading is built upon or associated with interests and needs.

There are several ways of studying the interests of youth. One widely employed procedure utilizes the Interest Inventory which contains questions concerning favorite leisure activities, reading experiences, familiarity with places of interest in the community, and related topics. It is suggested that these questions be used informally during an interview. On the basis of responses, areas of interest may be identified, evaluated, and employed as a basis for suggesting related reading experiences.[1]

Recently the writer and his associates have reported a series of studies of the interests of children and youth in which inventories and questionnaires were used to obtain data in 1958-1959.[2] These studies were extended, and included 300 students in each of grades 9 through 12 of the Chicago area.[3] The interests revealed by the students' responses to inquiries were assembled in four areas: television, radio, and movies; recreation and hobbies; reading; and vocational ambitions and educational choices.

In these studies, the appeal of the mass media was unmistakable. Today TV seems to be generally the favorite leisure activity mentioned by youth, although radio still enjoys great popularity. And students continue to go to movies outside the home once or twice each month.

Despite the appeal of the mass media, boys and girls find time to participate in a number of outdoor activities. However, less frequent participation than that reported in earlier studies appears in certain activities. There may be a slight reduction, too, in hobbies involving outdoor participation as compared with earlier times.

The students appear to be somewhat more realistic in their occupational preferences than those studied a decade or more ago. Girls mentioned more frequently than in earlier studies such occupations as teacher, nurse, and secretary. The boys today more often choose engineer and scientist.

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[1] Paul Witty. "The Role of Interest," Chapter VIII in *Development In and Through Reading*, 60th Yearbook, Part I, National Society for the Study of Education. Chicago: The University of Chicago Press, 1961.

[2] Paul Witty, Paul Kinsella, Robert Sizemore, and Ann Coomer. *A Study of the Interests of Children and Youth*, Northwestern University—Office of Education, U. S. Department of Health, Education, and Welfare, Washington, D. C., 1960.

[3] Paul Witty. "A Study of Pupils' Interests, Grades 9, 10, 11, and 12." *Education*, Vol. LXXXII (Sept., Oct., Nov., 1961).

One of the most significant facts revealed by this study is the very high percentages of both boys and girls who said they planned to attend college. Moreover, even higher percentages of their parents stated that they wanted their children to go to college. Another noteworthy finding was the close relationship between the subjects liked best by the pupils and those in which they received their highest marks.

The results in the field of reading are provocative. Thus, we find that while the mass media consume several hours daily, reading is accorded only a little more than an hour each day.

Most of the books reported fall in the category of fiction. Poetry, essays, and drama were less often read. Stories of famous people were best-liked in the nonfiction group. Popular types of books read by the boys were classified as adventure, mystery, and science fiction. Girls turned more frequently to stories involving romance.

Collectively these data present a picture of youth today surrounded by intriguing mechanical devices and opportunities for "purchased" vicarious recreation. Throughout the studies, the influence of standardizing forces and the power of the ubiquitous mass media were evident.

## 2. Survey of Factors Involved in Building the Lifelong Reading Habit and Practices Which Promote It

KATHERINE E. TORRANT

ONE OF the many stimulating experiences which my role in the field of reading at Newton affords is the opportunity to discuss and observe children's reactions to books as they exchange ideas about them. I was particularly delighted recently, listening to a group of third grade pupils discuss that rare book by E. B. White, *Charlotte's Web*, and give their impressions of the characters. For those unfamiliar with the book, it is a story of a little girl, Fern; Wilbur, the Pig; and Charlotte, the spider, written with humor and wisdom and overtones of mysticism. The children had recreated ideas and impressions which would long be recalled, and might continue to definitely influence their feelings toward their fellow men, *and* their reading habits!

What are the ingredients which *you* believe build permanent lifelong reading habits? I shall be interested to learn whether or not your listings are similar to those which my informal survey and interviews revealed. Results of my investigations regarding ingredients which promote lifetime reading habits reflect ideas of pupils, parents, teachers, librarians, supervisory and other school personnel. Responses pointed up major areas which have a direct influence on stimulating permanent interest and continued use of reading. Although comments, which I processed while investigating the topic, were varied they seem to fall into five categories.

It will not surprise the reader that one of the first and most frequently mentioned categories was the important influence of parents and the home atmosphere, particularly in the early years. Perhaps one of our most important jobs is to devise ways to teach reading and make suggestions on how reading is taught and how more can be done at home.

The second ingredient underscores Paul Woodring's emphatic statement, appearing in the *Saturday Review*, January 1962, in which he declares that "Teaching children to read is the most important single responsibility of the schools." This calls for a well balanced reading program in which, from the very beginning, children are given to understand that reading is a tool for opening up the world of ideas.

The third ingredient, and indeed of major importance, is the teacher! She, with all of her skill, knowledge, insights and understandings, fears and aspirations, is the magic key. Much of what happens in her classroom reflects her basic philosophy of teaching, how broad her definition and use of reading, and how willing she is to be counted among those who make a very real difference in the lives of boys and girls each day and in the days to come. Teachers who reflect Gibran's statement on teaching, "No man can reveal aught but what lies half hidden within you," know the importance of the discovery approach to learning, and the importance of having a pupil gain as much knowledge as possible through *his own mind*. Jerome Bruner has stimulated much interest in this area and made us aware of the fact that children who have a steady diet of this kind of instruction become genuinely absorbed in the subject under study and develop a style of thinking characterized by inquiry.

The fourth area mentioned in the survey referred to materials and the need for a much wider variety of trade books, periodicals, and audio-visual aids which enrich, extend and stimulate understandings far beyond basal texts in every subject field.

While all four of the points previously mentioned are indeed important, the final one is most vital if we are to interest, inspire and retain excellently trained, dedicated teachers. This calls for a school setting in which all school personnel work in harmony for the improvement of the educational program, and where there is freedom to try out new methods and ideas, wisely conceived, to discover whether or not they contribute to dynamic learning and greater achievement.

I should like to leave you with this thought from "Wisdom of the Sands,"[1] which is apropos:

> Therefore I summoned the teachers before me and I said to them: "It is not your task to kill the Man in the children of men, nor to change them into ants trained to the life of the anthill. You shall not fill them with hollow formulas, but with visions that are the portals of creative action."

May you all instill noble visions which will inspire creative action in your students!

## 3. The Basic Aim of the Literature Program

J. LOUIS COOPER

IT HAS been said that there are three types of illiterates: (1) those who can't read; (2) those who can read but do not; and (3) those who can and do read, but who never read anything significant. While we have usually been justifiably concerned about the first of these types of illiteracy, it appears likely that in many instances we have been most ineffective in serving the latter two.

All too often we have been disposed to consider the task of teaching children how to read as the sole function of the reading program. No one can deny that before a person can develop reading interests and tastes he must first master the basic mechanics of the process. However, many children have been subjected to reading programs which undoubtedly have taught them to read with some degree of skill, but which have left them with the attitude of the earnest young pupil who remarked, "Now that I've learned to read, do I have to?"

One of our major tasks as teachers of reading, or literature, is to promote reading interests, attitudes, tastes, and a love for reading; in short, to develop lifetime reading habits. If a literature program does not contribute to this end, it is doubtful that it serves any very useful purpose. It is apparent, however, that many such programs, particularly some at the secondary school and college levels contribute little to this major objective. In some instances the objective may be lost sight of; in others, the means that are used to promote it may fall short of their mark.

In teaching literature selections, teachers often are so concerned with the author's choice of words and with their own careful analysis of plot and character that their students are not permitted to read with open ears to hear what revelation the writer may have to make. While some formal analysis of reading selections may be desirable, it is entirely possible that on occasion we may dissect selections to such an extent that our students may tend to reject them. It is erroneous to assume that interpretation and appreciation are necessarily furthered by such a process.

In many literature courses the materials which children must read in order to satisfy the requirements for the course are so rigidly prescribed that little or no deviation from the designated list is permitted. In such cases, it is assumed that these selections are "musts" and that no student should leave high school without in some fashion having been exposed to them. In this connection, you may recall that when John Dewey, Charles Beard, and Edward Weeks were asked some years ago for the titles of the twenty-five books which each considered of greatest social significance and personal profit, there were only three titles common to the three lists. So it is with our literature programs. I do not know the one hundred books which all high school students should read because I do not believe in rigid absolutes, but I do know of hundreds of books which hundreds of children and youth should read. The position held here is that there should be ample opportunity for individuals to build their reading interests in the light of their unique personalities, and that interests and tastes are not necessarily furthered by the intensive study of a limited number of selections by all students. This is not to say that nothing should be prescribed; it is quite likely that at times certain books will be useful to the whole group and should be read by all or a large part of the group. On the other hand, it is also possible that in some instances the prescription may be too rigid.

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[1] Antoine de Saint-Exupery. "The Wisdom of the Sands," *Elementary English*, 2 (February, 1964).

The rigid prescription of reading matter brings to mind the story of the nightingale. There was once an Emperor of Japan who sent to the Emperor of China a mechanical nightingale which could be wound up with a key. As the members of the court listened to its singing, everyone was delighted with this mechanical bird made of jewels and whirring wheels. The music master, in praising the mechanical bird, insisted that it was much better than the real nightingale, not only as regarded the outside, with all the jewels, but on the inside, too. "Because," he said, "you see, in the real nightingale you never know what you will hear but in the artificial one everything is decided beforehand."

## D. COLLEGE

### 1. Reading in the Counseling Framework

ESTHER J. McCONIHE

To introduce my thesis it may be fitting to use the terminology of Gestalt psychology and say that the point of view herein stressed is that of figure-ground relationship, reading being the figure and the total person being the ground. Although the importance of reading in the total life space of the student is great, it must be considered in perspective when one is working within the counseling framework. The counselor in considering the student looks at him as a person functioning in the college society. In this setting the student is a complex of intelligence, achievements, specific skills, varied interests, personal values, goals and attitudes, and personality. Obviously reading is only one of the many skills of the fully functioning person.

Does this, then, mean that in counseling we can relegate reading to a position of insignificance among more salient features of the person? Experience leads one to give an unequivocal "No" to this question. What then is the status of the skill of reading? Let us answer this question by examining a specific case.

Bill M is a freshman hoping to major in science. He entered college with a total SAT Score of 1140, Verbal, 480, Math, 660. Bill's Cooperative Reading Test, C2, scores were Vocabulary 38, Speed of Comprehension 69, Level of Comprehension 48. On a math test Bill scored in the 99+ percentile as compared to Entering College Freshmen. His science aptitude is high. His Kuder profile indicates high interest on Scientific, Computational and Mechanical, low on Literary and Persuasive. Bill reports he has always had difficulty in English except when grammar was an important part of the course. Bill came to the counseling center because he was doing poor work in history and English and his grade point average was uncomfortably low as a result. He was discouraged and frightened but also bewildered and angry. He had a strong need to achieve in college and he was feeling like a man lost in a fog. He knew he had a good mind. He felt he put in the required hours for study. But the results were obvious: he wasn't achieving in English and history and without these he'd never remain in the school of his choice.

It doesn't take a Delphian oracle to see a relationship between Bill's dilemma and his reading skill. Patently the answer is, "Improve your reading and you'll improve your grades." This is the recommendation of the dean, very often, and of the reading instructor almost always. It is a reasonable and logical conclusion from the evidence.

The point I wish to make is that it is advice taken out of context. True, Bill is probably an ineffective reader and also true he would probably achieve with more success in college if he were to improve his reading skill. But reading is a reflection of personality, of values, of interests as well as of intelligence and training. It must therefore be tampered with only when these factors are an integral part of the re-training process. Bill's feeling of scorn for the somewhat nebulous concepts of psychology or for the mood and tone of subjective prose writing is part of his reading problem. His need to achieve at a level he has set for himself is part of his reading problem. So is his image of himself as competent, in control and master of his own fate. All these and many more factors are part of his reading problem.

Hence we do not refer Bill to the reading clinic and feel confident that his problem is solved. He must, before he can read more effectively, adjust the many facets that make up the total Bill so that the changes required to make him a more effective reader can be incorporated into his self-system.

At this point we have finally converged on the theme of "Developing Life-time Reading Habits." We are saying that a college student like Bill, and there are many, has been performing for many years in a given way with enough success that he has not encountered problems. Now he is being told, "Mend your ways. Change your approach, *Be* this way, not that way." We are saying, "Insert this shaped piece into the puzzle that is you, instead of that one." I suggest that although the new way is better, more effective, Bill must first re-align many other factors before he can fit the new shape into the old slot. We are saying that a habit which has been more less tension-reducing can be re-formed only after the personality has been able to fit it into the intricate complex which is the total person.

In conclusion, to consider reading in the counseling framework is to realize that the person is the reader, that only as effective reading habits fit the person can they be learned or taught.

## 2. Problems in Developing Lifetime Reading Habits at the College Level

ALBERT A. GALLEN

READING has a direct relationship to freedom. Books have the power to deliver us from ignorance and misunderstanding and to a considerable extent form an important basis for action and thought. The extent to which the right to read is denied or thwarted, to that extent is the individual's freedom diminished.

### Status of Reading

Despite the dire warnings of wailing fundamentalists and clarion critics that the reading situation has deteriorated to a low state, the sale of books has continued to climb far faster than the rising population would warrant. Between 1947 and 1958 we find a 46 per cent increase in the sale of books, whereas population rose by about 15 per cent.

When the content which is being read is considered, it appears that serious books and magazines, especially those relating to social conditions, are probably read by college people while light fiction and popular magazines are generally preferred by individuals of lower educational levels.

One cannot discuss the extent of reading without inquiring into the reading done by teachers who are products of higher institutions of learning. It has been found that teachers read about as much as other college graduates. But, the significant fact is reading is not valued any more by teachers than by other college graduates.

### Problems

Having looked briefly at the current

status of reading, let us look at a few specific problems which prevent students at the college level from developing lifetime reading habits. These problems stem from the effect of our culture upon reading, the caliber of college teaching, the reading skills of college students, and the condition of libraries in the United States.

### Cultural Aspects

It often has been said that our behavior is a reflection of the society in which we live. In this country one of the most pervasive elements affecting our problem is that we have not developed a "climate" for reading. Our values are materialistic and we fail to honor sufficiently the pursuit of knowledge and truth. A great deal of progress has been made recently. The need for educated personnel for the atomic age has conferred upon reading an honorable aura which can readily be gauged by the advertisements—"Send Me a Man Who Reads." However, a problem still exists, for with the emphasis on specialization, reading is confined to materials specific to one's own field, and people fail to keep abreast of contemporary affairs.

Although the pattern of conformity which has developed in this country is per se neither good nor bad, there are areas in which conformity resulting from social pressures is inimical to individual or group interests. The attitude toward reading can act as a kind of pressure stimulus. If "anti-intellectualism" or "egghead" is the expression of that attitude, the resultant conformity is a natural consequence.

### College Problems

More and more students with better backgrounds are entering colleges and universities. It is the school's responsibility to develop mature readers who are socially aware, skilled in the use of language, and appreciative of good literature. To what extent have these goals been realized? If social awareness is one of the marks of the mature reader, then why is there so much indifference to slums and poverty? Too frequently, overemphasis on the intellectual aspects of reading and too little attention to human values limit the goals of reading and inhibit reading beyond the college years.

Furthermore, intensive competition and pressures to achieve in college leave little time for education or for inculcating lifetime reading habits. The school must develop the kind of reading which involves human values and attitudes as well as the cognitive aspects, all of which are deeply engrained in the fabric and act of reading.

Finally, how effective can the teacher be in transmitting the desire to read who himself does little reading or who has not experienced what Thoreau has called "reading in a high sense?" How can he communicate any enthusiasm to his students or help them acquire critical and sustaining attitudes? The teacher is the important key to the problem.

### Reading Skills

The reading ability of college students can be described as being on a continuum from inadequacy to superiority. The problems in reading are related to interpretation, critical reading, and rate. These problems and the wide ranges in reading place a responsibility on the college and its faculty.

This we do know, that the skillful reader will read more and in greater depth than he who has reading problems. It is a revealing commentary that when college reading improvement programs are introduced in order to salvage or develop individual powers, much resistance or apathy is encountered.

### The Library

Another problem which interferes with the development of lifetime reading habits is the condition of the library in the United States. In 1963, one hundred and twenty eight million Americans, or two-third of the total population, had inadequate library services. To compound the difficulties, the per capita expenditure for books was only a little more than half the recommended minimum.

As for college libraries, about 75 per cent fail to meet minimum collection standards and a little more than half fail to meet minimum standard expenditures. With the expanding school population many libraries have curtailed their services and resources. Yet it is known that attitudes toward libraries are conditioned by previous experiences and expectations.

### Summary

There are many problems which prevent the fulfillment of our goal—the development of lifetime reading habits. We must aim at quality not quantity. Our concept of reading should not be narrow but should embrace modes of thinking and feeling which should be taught by all teachers. If we ourselves transmit enthusiasm and respect for reading in its wide sense, we will aid in developing the proper climate for reading. To do this requires persistence and communication so that a greater public for reading will emerge and will truly be free.

## 3. The Permanency of Gains Made in College Reading Improvement Programs

DARREL D. RAY

AMERICAN colleges and universities in general tend to accept reading services solely to provide immediate gains in reading performance, and evaluations reported in the literature tend to support immediate gains as justification for the program.

Many workers interested in college reading programs feel that although measurement of immediate gains is important, there is great need for extended evaluation of college reading programs. This need for investigations of the permanency of gain was recognized by Gray (1944) who stated in his summary of reading investigations that one of the limitations that greatly interferes with definite conclusions concerning reading improvement programs is the lack of information measuring permanency of gain. Yet, of the 64 studies reported by Bliesmer (1963) only two dealt with retention of gains made in college reading improvement programs. A review of the published literature since 1950 revealed only 15 studies dealing directly with the retention of gains.

The relatively small number of studies reflects a major problem in appraising the retention of gains, i.e., getting a sample population for retesting at a later time that is representative of the original sample. The effects of this are apparent when comparing original sample size and retest sample size and comparing the composition of the original and retest samples.

Among the methods used in appraising the permanent value of college reading improvement programs has been evaluation of (1) the change in academic achievement as measured by grade point averages, (2) the change in academic achievement as measured by achievement tests, (3) the change in attitude, and (4) the change in study habits. However, the technique used most often to measure permanent value of college reading programs has been the comparison of performance on some measure of reading achievement a period of time after completion of the improvement program.

This paper is a summary of the major investigations conducted since 1950 evaluating retention of gains made in college reading improvement programs and is limited to those studies measuring retention of reading gains.

Space limitations prevent the discussion of individual investigations. The investigations included studies of (1) college, adult, and military reading improvement programs; (2) developmental reading courses, speed reading courses, and study skills courses; (3) programs using a variety of testing devices; (4) programs varying in length from 18 to 45 hours and with sample size ranging from 18 to 204 subjects. The reading skills measured in the courses evaluated included rate of reading, reading comprehension, and reading vocabulary.

Of the 15 studies reviewed, seven indicated a retention of gain in reading rate, while five studies reported a decline in rate from the post-training peak; and three reported that gains made in the reading improvement program continued and increased beyond the post-training peak.

Only three of the studies indicated that gains in comprehension were retained, four studies reported a loss in comprehension performance, and two studies indicated there was a slight gain beyond the post-training test performance. One study reported a significant gain beyond the post-training test performance. Three studies indicated that no gain had been made in the reading improvement program for comprehension skills.

Two studies reported that increased vocabulary performance was retained. Three studies reported that vocabulary performance declined between the post-training test and the retest. One study reported that no gain in vocabulary performance was made during the course. One study reported a significant gain beyond the post-training performance. The remainder of the studies either did not report results or did not measure retention of vocabulary performance.

Only one study reported the retest sample as being representative of enrollees in the original improvement course.

The length of time following the completion of a reading improvement program and retest varied from 60 days to approximately two years, and seems to have no bearing on retention or lack of retention of gains.

The results reported in the studies summarized above failed to establish any kind of relationship between retention of gains and type of course, length of course, materials used, or period of time between end of course and retest. It is also evident that there was no consistency in change of performance of reading skills (speed, comprehension, vocabulary) reported, even in courses using similar methods of measurement.

Only a small percentage of the research in college reading improvement programs has been concerned with measurement of permanency of gain. The studies concerned with permanency of gain have been so dissimilar in methods and results that no conclusions can be drawn. It is evident that only cooperative research will permit the kind of evaluation that will be meaningful.

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## 4. What Next in College Reading?

BERNARD SCHMIDT

IN THE YEARS to come the number of students in literature classes will in many cases increase faster proportionally than the increase in college enrollment. We talk of times in the near future when classes of two hundred will be as common as classes of twenty-five are today. We like to say that a brilliant lecturer is more useful to two hundred students than an ordinary one is to twenty-five. Yet no matter how good the instructor, if the student is deprived of the give-and-take of classroom discussion, if he cannot express himself and question the ideas of his fellow students (and his instructor, for that matter), then he is missing a big slice of the educational process.

It is easy to picture a sea of students listening to a lecture on a highly subjective topic (for instance, the problem of evil in *Moby-Dick*). The students dutifully write notes and are expected to return the lecturer's evaluations, not their own, on the next examination. And woe to the student who doesn't—the papers will probably be marked by a graduate student who has had *his* instructions from the lecturer on what is "right" about evil in *Moby-Dick*.

Even if the examination is the essay type, the student who thinks creatively, who strikes out on his own, is very likely to be penalized. But what if the test is objective? Here we go even farther down the non-creative road. Imagine a room full of students marking a true-false test, checking little boxes with a special pencil. What now of evil in *Moby-Dick?* Is Ahab evil or not? Is he noble or ignoble? Is he an agent of the devil or man's protestor against senseless cruelty? The student had better know which box to mark if he wants to pass the course. Whether he agrees or not is of no consequence.

Another offshoot of the mass lecture class is the emphasis on fact and the avoidance of opinion and evaluation. As he looks down on a vast array of impersonal faces the professor often drones on about detail of plot and style and "influences." He may go through the book chapter by chapter. This sort of thing seems to be happening in other places too. In the February 1963 *Atlantic* Martha Gellhorn describes a class in a German university. The subject is Steinbeck:

> No one mentioned the meaning of Steinbeck's novels. No one was concerned with Steinbeck's picture of the human condition, with understanding and sharing experience. No one commented on the furious moral indignation which drove Steinbeck to write his earlier books. At the end of the term, the students would know the names of all Steinbeck's characters and every detail of his plots better than Steinbeck does, and that is all.

And so it goes. One sometimes wonders if it isn't better for a student to hate a book rather than merely memorize parts from it.

In our world the appeal to "authority" grows. As life becomes increasingly mechanized and complex the pressures increase to conform, to say the "safe" thing, the "right" thing. Stick to the "facts," we are told. Stay with the crowd. Don't be controversial.

Surely one of our best opportunities to combat these tendencies is in literature courses. What are usually some of our more general aims in such courses? Someone has suggested that we try to help students (1) get interested in reading, (2) become acquainted with some of "the best that has been thought and said," (3) better understand themselves and others, (4) learn how to make independent judgments, (5) develop tolerance; learn that good men often differ, (6) develop taste, and (7) learn that reading is thinking.

Perhaps if we could accomplish some of these aims, our students would better be able to stand on their own feet in a conformity-bound world. But the question remains: How much can be accomplished in the ever larger lecture classes where the student is a mere listener and where he has no opportunity to be creative, to test his own ideas against those of others? Many will no doubt agree that the mass lecture in literature courses is bound to dilute, rather than enhance, the possibilities of our accomplishing these objectives.

# SEQUENCE X THE ROLE OF THE LIBRARY IN THE READING PROGRAM

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## A. ELEMENTARY SCHOOL

### 1. Selection of Reading Material for an Individualized Reading Program

WALTER B. BARBE

THE SELECTION of material for any reading program is a major factor in the success of the program. Although one essential characteristic of the individualized reading program is "self-selection," the fact remains that there are many stages of selection before the student himself is given free choice. The teacher and librarian must be even more concerned with the reading materials which are made available for students to select in the individualized program than in the basal program. Perhaps the major reason they must use more care is that students will read both greater numbers of books and a greater variety.

It is important that we examine both the need for and a definition of individualized reading. The argument could well be made that there is no need for a shift away from basal teaching of reading, for children are reading better today than ever before. The only answer could be that while it is true that children are reading better than in years past, there is still room for improvement. Particularly in the area of developing permanent interest in reading is there need for still more effort.

The current impetus in education, the logical outgrowth of many years of concern for individual differences, is the development of individualized programs of reading. The proponents of the developmental reading approach have advocated for years an interest approach to the teaching of reading. The classroom teacher who centers her teaching of reading around the materials which the students have selected themselves, and in which the children are allowed to progress at their own rate, is participating in the developmental reading program at its highest level.

There is no reason to believe that individualized reading means the end of the basal reader approach. The two programs may be compatible. When an individualized program is recognized as an essential part of the total reading program, providing children with the type of program which best meets their needs, then it becomes only another approach to teaching reading upon which the resourceful teacher may rely. Individualized reading is only one approach. It is no panacea, nor can it be recommended as the best procedure for every classroom.

#### Selection of Materials

Availability of reading materials is a major essential in the individualized program. As part of the individualized reading program, the classroom library becomes the most important place in the room. This library differs from the central school library in a number of ways. Although some teachers continue to insist that children check books out of the classroom library, others have found that the classroom library should be used much as one's own home library is used. Although each child always has a book from the classroom library, keeping track of the material is not so difficult as it might at first appear. The classroom library supplements the school library, and in no manner replaces the need for the central library. In actuality, the classroom teacher will be more dependent upon a trained librarian within the school than ever before.

The materials which are available in

the classroom library must not remain the same. It is likely that there will be a certain number of books in each classroom which remain forever in the classroom library. For the most part, however, the materials are ones which are rotating among classes within the school, are checked out of the central library to the classroom library, are from the central library or bookmobile, or belong to the children themselves and are on loan to the classroom library.

Those people working in individualized reading programs generally recommend that at all times there be approximately 100 books within the room. Less than one-half, but usually more than one-quarter, are books which are in the permanent room collection. The remaining books are ones which are constantly changing.

The books must be on a wide variety of subjects and on a variety of reading levels. Books must be available for children reading below and above grade level. Surprising to some teachers is the fact that in such a program children quickly lose their consciousness of the grade level of the material and are directed more by interest level than by any other single factor. The extent to which the children learn to love reading is directly indicated by their increased use of central school libraries and city libraries and their purchase of books for themselves. Rather than replacing the need for other materials, the classroom library, as it is used in the individualized reading program, increases students' appreciation for books and their use of books from other sources.

### Conclusions

Individualized reading programs are becoming more popular throughout the country as a direct reflection of the concern for providing for individual differences in the reading program. As the highest level in the developmental program, breaking the lockstep approach too frequently found when basal readers are rigidly followed, the individualized approach allows students to progress at their own rate in material which they have selected for themselves. The teachers in such programs must learn more about students' literature. Librarians must not only assist teachers in selecting appropriate materials, but must contribute to the total program of teaching children to know and understand the field of children's literature.

## 2. Partners in Teaching Reading: The Classroom Teacher and the Librarian

RACHEL W. DEANGELO

WHERE the classroom teacher and librarian work together as partners, the elementary school library becomes the very heart of the reading program. A library well-stocked with attractive books on all subjects and all levels of reading difficulty, well organized, attractively arranged, becomes an extension of the classroom, and library activities become an extension of the reading program. In a library providing the books and proper stimulation and guidance, children learn to love to read, to make wise and wide reading choices, to grow in appreciation of good literature, and to develop effective reading and study skills. Five specific activities in the library program contribute to the development of reading taste and skill: (1) reading guidance activities, (2) curriculum enrichment activities, (3) listening and viewing activities, (4) instruction and practice in library skills and research, and (5) reading aloud.

*Reading guidance activities.* Even before the child enters school, he profits from reading guidance at the public library picture book hour. The school librarian enters the picture at the time of kindergarten registration. While the mothers are in conference with the teacher, the children listen to a favorite story in the library and are introduced to this wonderful "magic room." Later, as kindergartners, they select their own books to take home. Often letters co-signed by the teacher and the librarian (and endorsed by the principal) are sent to parents asking that they read the library books to their children. Later the letters ask the parents to let their children read to them. Notes to the teacher commenting on the children's reading are shared with the class and arouse great interest in the books read at home. A variety of activities have been used successfully with older children to stimulate reading, including library sponsored book clubs, book review bulletins by students, dramatizations, book quizzes, and book discussion.

*Curriculum enrichment activities.* The librarian provides the necessary materials to support and enrich each subject, then, working with the teacher, extends the reading program beyond the language arts into every area of the curriculum. In one school, interest in American folk heroes introduced by the librarian to a sixth grade class radiated throughout the school and resulted in wide reading for projects in art, music, and social studies, and culminated in as assembly program in which each grade participated.

*Listening and viewing activities.* The alert teacher who recognizes the value of quality films, filmstrips, and recordings in the reading program has a strong ally in the librarian. She, too, accepts these media as an integral part of a rich and varied library collection. Watching *Little Toot* or *And Now Miguel* on film is but another way to introduce children effectively to good books and to develop their reading taste, as is the reliving of *Treasure Island* or the epic of *King Arthur* through excellent recordings by master storytellers.

*Instruction and practice in library skills and research.* Library research begins when the child goes in search of his first answer to a specific question. Be it search or *re*search, the habit is forming; the skill is beginning. Students need the depth and breadth of materials provided by the library, and the classroom motivation for both instruction and practice in the use of these materials. Again, teacher and librarian act as partners in the reading program.

*Reading aloud.* It takes librarians and classroom teachers who know books and love books, who read widely themselves, to develop in children a love of reading, a discriminating taste, and the reading habit. "We cannot teach others to fly unless our own souls have sought the height." The librarian knows a host of good books for "reading aloud" at each grade level—books with a special literary quality, books that stretch the minds and touch the hearts of boys and girls, books that broaden their horizons and deepen their understandings, and books which children might not seek out themselves. What a rare opportunity for both teacher and librarian to introduce these books and to share in the joyful experience of reading aloud, which creates a bond between listener and reader and makes a lasting impression on children.

## 3. Using the Basal Reader as a Springboard to Library Reading

DONALD URQUHART

FROM AT LEAST Grade IV upwards one of the simple ways for a teacher to evaluate his reading program is to answer the question: "How much extra reading does the program stimulate?"

The main responsibility of a reading teacher, surely, is to encourage each of his pupils to become an individual who turns freely and with zest to books and to the libraries that contain them. It is surprisingly simple to lose sight of this goal in an attempt to produce mechanically efficient readers.

The various methods used to implement a developmental reading approach form a continuum. At one end is the exclusive adherence to a basal reader for each reading group coupled with great dependence upon the accompanying teacher's guides.

The other extreme is represented by the use of different books for each pupil from which individualized programs are constructed by the teacher. Somewhere between these two opposites it is possible to combine the best of both worlds. A teacher can retain the security provided by group instruction with first-rate basal readers and, at the same time, can handle these materials in such a way that the flexibility of a semi-individualized reading program results.

How is this achieved? Quite simply, when a selection from a basal reader is used for a directed reading activity, then it is in the follow-up stages that the individual use of library books becomes an integral part of the program.

In this constantly-repeated moving out

from basal readers to library books, four points must be kept in mind:

1. Every directed reading activity connected with basal material should include a planning session in which each pupil evolves an individual study project or some form of recreational reading dealing with interests aroused by the basal selection.
2. Maximum use should be made of the close liaison that must exist between reading teacher and librarian. Librarians have a right to know as much as possible about the pupils and their current areas of interest in order to provide the most appropriate materials. Teachers are justified in expecting fullest provision of the library books as part of the cooperation from librarians essential to any reading program.
3. The teacher must arrange his schedule so that time is provided for pupils to use their library books in the classroom setting.
4. The use of library books as a formal part of the reading program must be further emphasized by follow-up in the nature of reports. These reports are prepared and delivered by the pupils on a regular basis to the members of their reading group or to the whole class. The preparation of a report necessitates a clarification of the reporter's ideas. The delivery especially involves the skills of communication and listening. There are two main types of reports: (1) in the case of study projects, written and/or oral reports, (2) with recreational reading, oral book reports.

Many teachers feel inadequately trained for the teaching of reading. This continual use of the basal reader as a springboard to library books represents a realistic compromise between the potentially sterile rigidity of complete dependence upon basal material and the possible anarchy of a totally individualized program.

## B. JUNIOR HIGH SCHOOL

### 1. Stemming the Pressure on the "So Called" Advanced Reader

CAROLYN W. FIELD

THE JUNIOR HIGH years are probably the most difficult and confusing for the American teenager. He is being forced into an adult world for which he is not ready physically, socially, emotionally, or mentally. Just as the primary years are periods of change and growth from babyhood to childhood, so are the years between twelve and fourteen periods of change and growth between childhood and adulthood. Boys and girls have to mature slowly. Each person is an individual and matures at his own rate.

It is a dramatic change for a boy or girl to move from his neighborhood school, where he is in a self-contained classroom with one teacher who knows him as an individual, to a large school with students from various sections of the city where there are many teachers, few of whom will have the time to really know him.

Just at the time when the skills and interests in reading should be at their peak, when the teacher and the librarian can become the catalyst between the child and the wonderful world of books, the child becomes *one of many* shuttling from one class to another. This is the period when personal guidance in reading is vital because books that will help the child to understand himself and others, and will help to sensitize him to human problems and values, may be missed. And if he does not read these books at this time, he will never go back to them.

Children are not born with the instinctive wisdom to select the best. They need guidance, particularly in this day and age with masses of books pouring from the publishing houses.

Why do children miss the books written for this particular age group? It is because the adults, parents, and teachers, are pushing them ahead too fast.

Let us start with the parents. "My child is advanced" is a phrase heard over and over. Parents permit, even encourage, the child to dress and act like an adult, to become a miniature adult. On the one hand the child is coddled and given no responsibility. On the other he is thrown into situations for which he is not prepared, and parents are aghast when he reacts violently.

If the parent is a reader himself, he may know picture books and perhaps the fairy tales, but he will not be familiar with the books written for the older boys and girls. So when his child gets into the junior high grades, he will promote the books that he knows, namely, adult books. Few parents discuss books with their children and have little conception as to how much the child is getting out of books. A parent may push his child to concentrate on school assignments and thus permit him no time for personal reading. Today, it seems as if the majority of children fit into one of two categories: the child who comes from a culturally poor home where reading means nothing to the parents, *or,* the child who comes from a home where the parents feel that high marks and adult books are the criteria for status. Poor child.

And the teacher, where does he come in? He is the one with whom I have the greatest complaint. He is the one who should be able to make the years of change from childhood to adulthood exciting and broadening. He is the one who can introduce the child to books that will help him develop and understand himself and others, make him sensitive to others, and provide him with standards and values for making decisions.

Basically, the problem is three-fold: the teacher does not really know the reading needs of seventh and eighth graders, does not know the materials and services available in the public library, and does not know the books that are suitable and available for this age. Repeatedly, seventh graders are sent to the library for books that are definitely adult. One teacher gave his students a list of 60 titles of which only 18 were in the children's collection. What were some of these books? *Pride and Prejudice, Wuthering Heights, The Good Earth, Rebecca, Giant, Hiroshima, Cyrano de Bergerac, Exodus, The Caine Mutiny, The Robe,* and others. These books are on high school and college reading lists and are in great demand by adults.

These books were written for adults, and the conflicts, relationships, and emotions presented in them are incomprehensible to the 12 or 13-year-old. Where are *Young Fu of the Upper Yangtze, The House of Sixty Fathers, A Diary of a Young Girl, Warrior Scarlet,* and the other books by Rosemary Sutcliff? *The Sacred Jewel* by Nancy Faulkner? The books by Elizabeth Speare or the Betty Cavanna, Mary Stolz, James Summers books that present problems that are pressing for these young people?

These books are on library shelves waiting for the reader, *but* the teacher does not know them. He assigns the books that he knows, the ones that *he* read in high school or college.

Librarians recognize the fact that many children are advanced in certain areas of knowledge, namely the sciences, and are buying adult materials for the children's collections or making provision for the child to use the adult department. Very often the material the child can understand is not in the adult but in the children's collection. Recently, our most annoying assignment was from a social studies teacher who told his eighth grade students that they *must use adult material only.* Obviously this teacher does not know that several excellent books in the areas of law, labor, and war have been published by the children's departments of publishing houses.

One other problem is research. When a second grader comes in and says he has to do "research" on a particular subject, there is only one person who could have told him this, the teacher. When a seventh or eighth grader comes in to do *research* on a subject, again, there is one person who could have used this term with him—the teacher! How can anyone do *research* when he does not even know how to use the card or book catalog or an encyclopedia? School librarians are striving to teach children the techniques and skills for using the library and reference books, but they cannot do it alone. Teachers must help and the first step must be to find out what is available and how it can be used.

## 2. The Role of the Library in the Junior High School Reading Program

M. JERRY WEISS

FOR MANY years persons interested in the teaching of reading have been greatly concerned with the development of reading skills, grouping procedures, the development of skill-building materials and kits, organization and administration of special kinds of reading services, etc. I suppose these are all important factors, but at times I wonder if we aren't getting lost in a world of jargon, mechanics, and gadgetry. Are we moving farther and farther away from our real purpose—the development of lifetime readers? Whatever happened to the idea of bringing books and children together? Isn't that important today?

Somehow I feel it is. I am concerned greatly with the interaction between books and children. I feel that the library is the real core of the reading program because here is where books and children get together for the real learning to take place. This idea is not original, but it certainly is an outgrowth of my own experiences as a student, a secondary school teacher, and now as a person concerned with the training of teachers for all levels.

These experiences have made me so bold as to raise a few points for your thinking and reaction:

1. I am convinced that reading is not a separate subject. Any subject we teach in the junior high school requires the mastery and application of certain reading skills. Therefore, all teachers need a course in the teaching of reading and need to know how to apply sound principles of reading instruction within each of the content areas.

2. Reading is an extremely personal experience. Each individual brings something to and gets something out of any reading activity. It is because we enjoy this personal experience that we continue to read.

3. Reading is a selective experience. Each of us has his needs and his moods. One day we need information about political candidates; that same evening we find pleasure in the writings of James Thurber or Muriel Spark or Ian Fleming. We need to provide experiences through which students can choose books for their many needs and moods.

4. Effective reading requires critical thinking. In a recently published book concerned with criticizing the types of texts being used in the secondary school curriculum, I found the authors pretty much convinced that *the text* is more often the curriculum guide than not. This is a pretty sharp attack on teachers. Is there really *a text* for all students? Don't we need a variety of materials to point out the many points of view, the many interpretations of critical ideas and issues as revealed in the many printed sources today? Can critical thinking come from a single source?

5. In any junior high school classroom there is a wide range of interests and abilities. Doesn't a teacher have the responsibility to provide for these individual differences?

These are just a few of the many aspects of a reading program that junior high school teachers might think about. If they are important, then the library might very well become the hub of the program. For in the library we should have a wide range of materials covering all fields of academic and personal interest. Here students can read widely and pursue independently their special interests and assignments. Teachers and librarians can work effectively together in helping each child, regardless of his reading level, to find reading material which he is interested in and can succeed with.

This means that teachers will need to move from a single text guide to developing courses of study based on important topics to be learned. Then the library becomes the source of investigation for each issue to be covered. Instead of all students reading the same book, each student is free to select materials which will contribute to his understanding of that topic.

Is there any real justification for all students to read the same novel at the same time? Can't we choose a theme—such as "Man's Search for Justice"—and have students read in different books to find out how authors of all times in all countries of the world have treated this theme? Later students should be permitted to share their reading experiences with each other.

If we are to deal with individual differences, and if we are to provide the most meaningful educational experiences for our students, then let us look once again at the tremendous number of hardcover and paperback books available today for our school and classroom libraries. Let us be more concerned with bringing children and books together. Then our students can really apply the many skills of reading. Only if we cater to the personal interests and values of reading for each individual, will we ever hope to develop that student into a lifetime reader. The library offers us the materials and services that should be basic in any junior high school curriculum.

## 3. The Role of the Library in the Junior High School Reading Program

Anne W. Pitts

Inevitably connected with the improvement of learning achievement is consideration of the improvement of learning's tools. The most basic of these are the language arts, particularly reading.

The District of Columbia has developed a Reading Improvement Program which I will present here. The story of how this program evolved is told primarily to stimulate continued action in the use of the library as a valuable tool in improving reading achievement.

Students in the District junior high schools are learning to read more critically and with greater precision as teachers continue to emphasize the reading abilities that are essential in the subject matter areas. The students have shown greater maturity in applying what they read, in reorganizing, in summarizing, in comparing ideas received in reading with other sources of information, and in carrying such ideas into actual solution of problems rather than mere discussions. Additional conclusive evidence was presented when individual schools received the 1961, 1962 and 1963 results from the Iowa Test of Educational Development which had been administered each year during this period to all ninth classes as part of the city-wide testing program of the Department of Pupil Appraisal. The Iowa Tests measure much more than generalized reading skills. "Essentially, they are intended to measure the pupil's ability to do CRITICAL THINKING in the broad areas designated. They are concerned not so much with WHAT the pupil has learned, in the sense of specific information, but rather with how well he can USE whatever he has learned in acquiring, interpreting, and evaluating new ideas, in relating new ideas to old, and in applying broad concepts and generalizations to new situations or to the solution of problems."

The 1960-61 Iowa test results for grades nine and ten in the District schools represent achievement for the first groups to progress through the junior high schools during a three years period in which there was *direct teaching of reading skills* with approximately three thousand students and the *provision of competent guidance and purposeful, persistent practice* for all other students. The data show general achievement for District junior high schools at and above the national norm. Results for 1961-62 and 1962-63 reveal that scores in nearly all areas were practically identical with results obtained in 1960-61.

A comparative study of achievement data for grades nine, ten, and twelve during the period 1955-56 (the first year of school integration) to 1962-63 shows a consistently strong picture for the District secondary schools. There is clear indication that the school-wide reading and study skills program had a definite effect on the achievement of the students. At each grade level, the group which had progressed through the junior high schools during the period appropriate help in reading was provided scored significantly higher than the groups for which no reading instruction had been provided. Improved achievement has been consistent for each school. The only thing systematic and universal for these schools was reading. This common experience, this consistent pattern strongly suggests that there is a positive relationship between the Reading Improvement Program and general academic achievement.

When an entire faculty understands the

reading problems in all areas and unites in attacking them, reading improvement is bound to follow. Agreed upon goals give a sense of direction, and students receive increased individual attention. Teachers start stressing those reading abilities and study skills that are required for successful mastery of secondary content fields. Students are taught how to use libraries and do reference work much more efficiently than in an organized course in library instruction. Failures decline. Dropouts are reduced. If every child must go to school to age sixteen, then the school must supply needed tools. Otherwise, our school systems will produce ill-equipped and reluctant learners; our teachers will attempt to guide increasingly indifferent and cynical youngsters. Seething with antagonism about schooling, these boys and girls finally become DROPOUTS.

## C. SENIOR HIGH SCHOOL

### 1. How the Library Contributes to Students of Different Abilities and Backgrounds

RUTH STRANG

LIBRARIES *make individualized instruction possible.* There are many ways of providing for individual differences. Teachers can individualize instruction while they teach an entire class. Administrators may section pupils horizontally on a given grade level, or vertically by cutting across age levels as in the Joplin plan. Teachers of every subject may subdivide pupils into fluid groups according to reading ability, or reading difficulties, interests, and projects. Publishers put out multi-level material. Finally there is individualized reading, in which each pupil chooses books to read that are suited to him, while the teacher holds individual conferences with other pupils.

Underlying all these methods of individualizing instruction is the contribution made by the library and the librarian. Books should be available throughout the school—in every classroom, in laboratories, study centers and, of course, in the school library. The public library, traveling library, and special libraries extend the possible range of pupils' inquiries and interests. The library should serve also as an instructional materials center where pupils may learn by looking at pictures, filmstrips, and films, as well as by reading books and magazines.

*Libraries reward retarded readers.* The choice of the right books is crucial for a retarded reader. Giving him a book that is too easy or too difficult, or one that fails to elicit his interest, only confirms his previous impression that "reading is for the birds." Teacher and librarian should suggest several books that the pupil can read independently and with enjoyment, and then leave him free to choose—and free to reject the books that he does not want to read. The teacher should help him to get started in reading and show continuous interest in his progress.

*Able students become independent learners.* One of the best ways to develop talents is to supply a wealth of reading material. Able pupils welcome the opportunity to take initiative and to learn for themselves. They will set up a reading curriculum for themselves. All they ask is access to the books they want, and an occasional conference with the teacher or librarian.

*Reluctant readers can become interested.* If reluctant readers are assigned to a library period followed by a discussion period, if they have reasonable freedom of choice, and if the librarian is skillful in introducing books that appeal to them, most of them will respond. These pupils can read but don't, until they discover that reading has personal meaning, use, pleasure, and purpose for them.

*Libraries serve many purposes.* From the pupil's point of view libraries serve a wide range of purposes. Let us listen to some of the comments made by pupils:

"At times I go into a library to relax."

"I go to the library to read for enjoyment."

"The library has helped me in another way this year: There's a cute girl up there every second period whom I've got to know better."

"There is no more appropriate place to do your studying than the library; it creates a marvelous atmosphere for work."

"I consider the library my sun with all my academic classes orbiting around it. Without it I'd be lost."

"To me, the library has always been a source of amusement, information, and escape from the realistic world."

According to a reading specialist, libraries "bolster the reading program" by teaching pupils how to use their facilities, providing a wealth of books that supplement the texts, extending pupils' interests, and helping them to solve personal problems and find delight in reading.[1]

*TV can be an ally of the library.* There is evidence that certain TV programs send youngsters to the library for various reasons—to learn more about a certain field, to read the books they have seen dramatized on TV, to answer puzzles and questions presented on quiz programs. One English teacher capitalized on Laurence Olivier's TV performance of *Richard III* as motivation for a week's study of Shakespeare.

*Wide reading develops resources of the mind.* According to some authorities, young persons with no resources of mind are likely to become delinquent, alcoholic, mentally ill, or to drop out of school. A lifelong habit of using and enjoying books and other printed materials is good insurance against succumbing to the vicissitudes of life.

## 2. Teacher-Librarian Teamwork in the High School Reading Program

LYDIA A. DUGGINS

A LIBRARY *is a place set aside.* You can go there to have an argument with Plato, do research with Pasteur, try human conscience with Shakespeare, go racing after ideas in research volumes, or just "stop by a snowy wood on a winter's evening" and dream a little with Robert Frost.

A library has special smells, sights, and sounds: of old leather, muted voices, little halos of light over long tables, sunshine streaming—always a little dusty—through windows, a sense of unlimited space, of belonging, and of timelessness. Just holding a book and sitting in a library, protected, assisted, and claimed, has its own justification.

*How does it get that way?* It starts with librarians and teachers who love, respect, and value books too much to make the library a place for "getting book reports," "doing required reading," "staying after school," or "remedial reading." They want high school students to have a "crush" on books, to find them "real cool man," to "dig" them, and they team up to achieve this goal.

*What is a teacher-librarian team?* It is two or more people promoting "going steady" between children and books. A team isn't just people swapping ideas or materials. It consists of a group working toward a pre-determined goal. The methods of achieving this goal may and will be worked out as efforts are expended toward achieving it. Concern with this goal and responsibility for achieving it are vital to all members of the team regardless of their specialized functions.

*Everybody helps on the teacher-librarian team?* It is customary for high school teachers to think of the school librarian as a person who *assists them* in locating and securing reading materials. Rarely do teachers see themselves as contributing to or assisting the librarian. Even when this is done, they see themselves in the role of perfunctory administrators "keeping order," regulating the flow of students to and from the library, or giving lectures on the proper care of books.

*An attitude of mutual respect for the contributions and concern for the utilization of special skills is an essential starting point.* Such a relationship is established on mutual experiences of a satisfying nature in helping children learn to use books efficiently and to love them well. A teacher must be as concerned about sharing information with the librarian as the librarian is with the teacher. Estimates of children's reading levels, information on their reading tastes and interests, outlines of topics to be studied by a class, curriculum planning by the entire faculty . . . these are some of the areas of cooperative action that facilitate the work of the teacher-librarian team.

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[1] Helen Huus, "Libraries Bolster the Reading Program," *The Reading Teacher*, XIV (March, 1961), p. 236.

*Teacher-librarian teams in action demonstrate the effectiveness of cooperative action.* At Bunnel High School (Stratford, Conn.) the special teacher of reading finds the librarian indispensable in helping to secure classroom units of materials suitable for high school students ranging widely in intelligence and reading ability. Another high school teacher finds the librarian helpful in the hobby of ancestor tracking and through mutual interest the teacher and librarian lead the students to trace their own family trees. At University High School (Bridgeport, Conn.) it is felt that when teachers and librarians take courses in reading together, the shared background of understandings and skills promotes good teamwork. At North Haven High School (North Haven, Conn.) the librarian delivers books to the teacher's classroom at mere mention of interest in a particular subject or book. At Bedford Junior High School (Westport, Conn.) the supervisor and the librarian pore over reference books as they plan together ways in which the library can serve the school. At Purdy's Elementary School (Westchester, Conn.) the librarian is involved in all aspects of the school program. At Center School (New Haven, Conn.) the librarian helps secure books suitable to gifted readers. The children are a part of the library team at Murray Avenue School (Larchmont, N. Y.). At Middlebrook Junior High School (Trumbull, Conn.) the librarian and teacher present a unit together in the classroom and in the library. In North Salem School District, the community planned with the school to make all books in the public and school library more available to students during the school year and in the summer.

*Summary.* A library is a place set aside, but it is more. It provides an experience in which teachers, librarians, and community form a team to promote "going steady" between children and books. This teacher-librarian team has mutual goals developed out of shared experiences. Everybody helps on this team, working together, poreing over lists, attending meetings, and studying together in an attitude of mutual respect for contributions, concern for utilization of special skills, and for the fostering of the individual interests of the members. The teacher comes to the librarian and the librarian goes to the classroom. They undertand each other. They enlist the children and the community in the library program. It is a program of action. The books get up and move for and to the students who sit and read with a nice, comfortable feeling.

## 3. Establishing a Working Relationship Between the Librarian and the Consultant

ORLANDO J. CANALE

"LIBRARIES are the vessels in which the seed corn for the future is stored." So writes Dorothy Canfield Fisher.[1]

This is indeed an apt expression for describing the importance of the modern school library, and a useful statement if we stress the idea of the future, rather than the idea of storage.

Where storage is stressed, the librarian may be considered primarily as a keeper or custodian of books, rather than a highly trained, and skillful resource person. Viewed in this restrictive manner the best of skills may become stifled.

In like manner, the reading consultant, considered primarily on the basis of his teaching commitments, cannot function fully for the improvement of reading in a total program. It would seem better not to think in terms of a single broad function or sphere of responsibility for either the consultant or the librarian. Rather, let them share their ideas, skills, and problems in a joint effort for reading improvement.

The school which employs a consultant and a librarian offers them a unique opportunity for some challenging teamwork as a reading team. Once basic goals are set by the administration and the teachers, dependent upon the particular aspirations and needs of the local school, the reading team may formulate a plan of action.

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[1] Dorothy Canfield Fisher. *The Stronghold of Freedom*, in The Library of Tomorrow, ed. by Emily M. Danton. Chicago: American Library Association, 1939, 22ff.

This plan might include ideas based on a three-fold approach:

1. Ideas a librarian might use to enhance the consultant's understanding of the role of the library in the school program.
2. Ideas the consultant might present for the librarian's understanding of the reading program.
3. Ideas arrived at by the consultant-librarian team for use with the administrators, teachers, and pupils.

Let us consider how the librarian might assist the reading consultant:

1. Reviews on cards might be sent to the consultant for his perusal.
2. Tours of the library might be made with the consultant to explain the mechanics of classification, cataloguing, etc.
3. Interests of the readers in terms of the general circulation might be discussed with the consultant.
4. Educational articles having a bearing on reading might be referred to the consultant.
5. A library news bulletin published by the students with the librarian's guidance might be shared with the consultant.
6. The professional shelf for teachers might include books on reading instruction.

Next, we shall consider how the consultant might assist the high school librarian:

1. A list of advanced readers, and a list of remedial readers might be furnished to the librarian.
2. Copies of individual reading reports and tests might be sent to the librarian.
3. Specially prepared reading materials might be discussed with the librarian.
4. Current trends, tests, and methods of instruction in reading might be shared with the librarian.
5. The consultant might have the librarian observe during reading and testing sessions with individual students.
6. The consultant might act as a guide for the librarian on a tour of the reading center.

Finally let us consider what the consultant and librarian working together might do for the over-all reading program.

1. Meet together regularly and with the administration for short discussions of ideas, problems, and progress.
2. Prepare together a list of books for purchase based on what is known about the abilities and interests of the students.
3. Plan together a reading handbook that would emphasize the idea of a consultant-librarian approach to the problems of reading.
4. Sponsor together, when possible, reading meetings of the local IRA Council in the school library.
5. Invite teachers and FTA members to the joint meetings when feasible.
6. Keep together a bulletin board in the library, devoted to literature and reading.

The use of the preceding suggestions would demand time and patience. Each idea would be evaluated for contribution to the wider and more effective use of the resources of the high school library.

## 4. Solving Vocational and Personal Problems Through Reading

MARGARET G. GREEN

COURSES in reading were not offered in the high schools in Volusia County, Florida, several years ago. Due to the demand for reading services, the Daytona Beach Junior College offered an eight weeks' summer session. The program is best described by the terms developmental, corrective, and remedial reading. Our program evolved over a period of several years.

A reading program must be so designed as to provide assistance to individuals in the achievement of their developmental tasks of life if they are to be well prepared to meet the challenge of the aerospace venture. As we considered the developemental tasks in planning our program in 1963, we involved some of the provisions of a developmental reading program as cited by Margaret Early, quoted by Spache.[1]

How could we assist this heterogenous group, reading levels ranging from fourth grade to fourteenth grade, to find the keys to meet their needs?

*Solving Vocational and Personal Problems Through Reading* was chosen for the theme because of the "I" appeal. It was developed from these viewpoints:

I. Guidance—Personal and Vocational

- A. Diagnosed difficulties in reading, study skills, and library skills as well as the potential to achieve; questionnaires and projection techniques were used to determine attitudes and interests toward reading and learning. Test results, personal and vocational goals were discussed and explored in the first counseling session.
- B. Personal letters to the instructor were written weekly and showed improvement and change in attitudes, interests, and philosophy.[2]
- C. Motivated and stimulated students by presenting framework for self-actualization:
  - 1. concepts of positive thinking
  - 2. concepts of success
  - 3. concepts of self-discipline
  - 4. concepts of goals[3]

II. Speaking

- A. Discussed books as related to the areas of vocational and personal problems and to the self-actualizing concepts through (1) panel discussions, (2) group discussions, (3) individual discussions. (Books chosen through the Reading Guidance phase of the program.)

III. Writing

- A. Personal letter writing to the teacher.
- B. Investigative thesis paper coordinated the skills of reading and writing to assist the student in planning steps to solve his problems.

IV. Reading Study and Library Skills (Developed according to the needs of the student)

- A. Reading for information.
- B. Locational skills.
- C. Organizational skills.
- D. Study skills.
- E. Critical reading.
- F. Interpretive and creative reading.
- G. Reading in the content areas.[4]

V. Reading Guidance[5]

- A. Interests, vocational and personal problems studied and bibliography prepared to suggest interesting books to help students solve problems.
  - 1. Superior students prepared their own bibliographies.
  - 2. Some read many books by same author.
  - 3. Superior students guided into creative and critical reading; reluctant and retarded reader guided from elementary level of reading and thinking to a more advanced level.
- B. "I" approach launched with the reading of biography.
  - 1. Biography assumed to have a more powerful and potential influence on the attitude and behavior of its readers.
  - 2. *Reading Ladders for Human Relations,*[6] *Good Reading for Poor Readers,*[7] and *Gateways to Readable Books,*[8] also aided us in finding the right book for the right child.

VI. Vocabulary

- A. Vocabulary growth came as a normal part of the guidance in communication skills.
- B. Challenged the student with (1) cartoons, (2) editorials, (3) puns, (4) humor, (5) interesting word origins, (6) crossword puzzles, and (7) games; students challenged each other with words found in their reading.

VII. Parent Participation

- A. Parents invited to a series of four meetings.
  - 1. Discussed program and its purpose.
  - 2. Guest speakers discussed personal and social values of reading, the responsibilities of teachers and parents in developing "readers" who can read and will read.
- B. Conferences were scheduled with parents at their request.

In summing up the program: Students decided there were three R's in life and education—Reading, Reading, and Reading. Students were conscientious, congenial, and motivated. The last personal letter, which was an evaluation of the program, revealed that they felt a definite need had been fulfilled and that they wished all students could participate and benefit from the program.

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[1] George D. Spache. *Toward Better Reading.* Champaign, Illinois: Garrard Publishing Company, 1962, p. 46.

[2] Ruth Strang. *Counseling Technics in Secondary School and College,* Revised. New York: Harper and Brothers, 1940, pp. 98-99.

[3] Abraham H. Maslow. *Motivation and Personality.* New York: Harper and Brothers, 1954, p. 411.

[4] George Spache and Margaret Green. *Reading in the Secondary School of Volusia County.* Board of Public Instruction, Volusia County, Florida, pp. 3-30.

[5] Florence Cleary. *Blueprints for Better Reading.* New York: H. W. Wilson, pp. 114-150.

[6] Margaret M. Heaton and Helen B. Lewis. *Reading Ladders for Human Relations,* Revised. American Council on Education, 1955.

[7] George Spache. *Good Reading for Poor Readers.* Illinois: Garrard Press, 1962.

[8] Ruth Strang, Christine B. Gilbert, and Margaret C. Scogger. *Gateways to Readable Books.* New York: H. W. Wilson and Co., 1952.

# SEQUENCE XI PRE-SERVICE AND IN-SERVICE TEACHER EDUCATION

## A. ELEMENTARY SCHOOL

### 1. Meeting the In-Service Needs of Elementary Teachers in Reading Instruction

HELENE M. LLOYD

THE New York City school system is huge. It enrolls more than a million students—only five cities in the United States have more *people* than we have pupils. Our staff numbers 40,000 professionals—a city's worth of people.

The Elementary Division of our school system is huge, too. In kindergarten through grade six we have more than 600,000 children—outside of New York City there are only 13 cities in America with more people than we have boys and girls who are trying to learn to read. These children are in 580 elementary schools, staffed by 20,000 professionals.

Bigness of an educational system brings with it honor—but also problems. How do you get 20,000 professionals to agree to something, to pull in the same direction? How do you lend administrative and supervisory direction to so many people simultaneously? Why, to mail even one letter to them costs a thousand dollars in postage alone!

The answer: *in-service training*. Only by massive in-service effort, with the utmost coordination, can a school system lift itself up by its own bootstraps. Four years ago, New York City's elementary schools pinpointed reading as the area most needing improvement; for four years, then, we have been exerting massive in-service effort in this direction.

**Metropolitanitis**

Our in-service bootstrap operation in behalf of better reading has been burdened by some unique problems, every one of which underscores the urgency of having a massive in-service program.

1. *We are a city of tremendous teacher turnover*. During 1962-63, the median length of service of our elementary teachers was seven and a half years. In 1962-63, our 20,000 professionals at the elementary-school level included 5,000 newly-appointed, beginning teachers. This year, 1963-64, we feel we have made a great gain. Of our 20,000 professionals, "only" 4,000 are newly-appointed beginners!

2. *We are a city where children "live on wheels."* In the borough of Manhattan, the average mobility of the elementary school population is 51 per cent (that is, slightly more than half the children end the school year in schools different from those they enter in September). You can see, then, why changes in instructional patterns must be consonant throughout the city; one school by itself cannot turn back the tide.

3. *We are a city with many socially-disadvantaged children*. The need for these children to learn to read is real, is urgent, both to themselves and to society. The urgency is increasing, too, for those of whom the need is characteristic are moving in ever-inreasing numbers to our city.

4. *We are a city where many children are non-English speaking*. Of our 600,000 elementary school children, one out of every eight is non-English speaking. Meeting the needs of these young Americans involves special teaching abilities and procedures; new teachers usually lack the special preparation such situations call for, and the only answer we have is: in-service training.

5. *But we are also a city with many highly capable children whose reading needs are different*. These needs must be

met, too, and this is sometimes difficult for a teacher when her focus has been concentrated on the average and below-average learner. Only by in-service training can we maintain balance in meeting the reading needs of children at the upper end of the talent scale, too.

### The New York Action Program

To overcome the hurdles to reading instruction indigenous to any large city and to overcome particularly the unique ones that I have specified, New York City developed a six-prong "Action Program." The individual aspects cannot be ranked in any order of effectiveness, for each reinforces the others and draws reinforcement from the others.

*Action 1: Reading improvement has been given top priority at the supervisory level.* For each of the past four years, the principal of each of our 580 elementary schools has had reading improvement as his major objective for the year. He has iterated the supervisory procedures by which he has planned to move ahead the school's program of reading instruction. These procedures are, of course, in-service training at the functional grass-roots level. Our supervisors have themselves participated in special courses, workshops, and conferences to enable them to increase the effectiveness of their in-service effort in behalf of better reading.

*Action 2: Reading instruction has been reinforced by a taskforce of special reading personnel.* Some of these specialists teach reading, but most of them concentrate on helping the regular classroom teachers increase their own effectiveness.

One category of specialist is that of *Reading Consultant.* Each of our twenty-five area, or district, offices has a Reading Consultant who works under the direction of the district field superintendent in schools that he selects.

A second category of specialist is the *Reading Improvement Teacher,* one of whom is assigned to almost every elementary school in the city. This specialist assists other teachers—especially newly-appointed teachers in grades one, two, and three—by giving demonstrations, by helping them in the preparation of lessons and materials, by assisting in the measurement of children's reading needs, and in many other ways.

A third category of specialist is the *Corrective Reading Teacher,* one of whom is assigned to about half our elementary schools. The Corrective Reading Teacher meets with small groups of children who need corrective instruction, but she also devotes not less than 20 per cent of her time to working with the newly-appointed teachers in grades four, five, and six.

A fourth category of specialist is the *Reading Counselor* who works in one of our eleven Reading Clinics. As you would expect, the reading clinic staff members are frequent speakers at neighborhood faculty conferences where they perform richly an in-service training function.

I also want to underscore the name of a fifth category of specialist, even though the word "reading" does not appear in their titles. I refer here to the supervisors of our schools—the principals and assistant-to-principals who, in order to fulfill their responsibility for their own school's improvement of reading achievement, have taken courses, have conducted experiments and pilot projects, have lead study groups, and in many additional ways developed themselves into *bona fide* reading experts.

*Action 3: The formal increment in-service courses in reading methodology have been strengthened, publicized, and brought into new effectiveness.* Would you believe that 8,000 teachers simultaneously enrolled in a reading improvement in-service course? This occurred. We cooperated with our state department of education in conducting a television in-service course on "The Teaching of Reading in the Primary Grades." There were 15 telelessons of 30 minutes each, with each telelesson followed by a 50-minute workshop conducted by a principal, assistant-to-principal, or member of the reading task force. The program was supported by a study-guide booklet that had been prepared for the occasion, as well as workshop guides for each leader. Following this course, a similar one on "The Teaching of Reading in the Intermediate Grades" attracted 6,000 enrollees. We have repeated these courses for additional teachers. The kinescopes of the broadcasts have been available for many faculty meetings.

In addition to the television in-service courses, many other standard in-service courses for increment credit have been sponsored by the Elementary Division, as: "Supervision of a Reading Program," "Diagnosis and Treatment of Reading Disabilities," "Individualized Reading," and the basic course—"Materials and Methods in the Teaching of Reading." We estimate that 18,000 of our 20,000 teachers have taken one or more reading-methods courses in the past four years. This is what I meant previously by "massive" in-service effort!

*Action 4: We have utilized the collegiate talent in and around New York City through the establishment of the Reading Academy of the Elementary Division.* This is a group of 125 college reading specialists and members of the city school staff who meet regularly to discuss problems relating to reading improvement, to arrange cooperative studies, to report on projects and research, to try new ideas "for size," to help one another analyze problems, and in other ways to share experiences for mutual benefit.

A second result of the reaching, welcoming hand has been the establishment of the *Campus School Program.* In this program nineteen colleges have selected two or more elementary schools to use as centers for directed observation, student teaching, research studies, pilot projects, and innumerable other activities. Some of our finest strides in reading improvement are the handiwork of young teachers whose *pre-service* training included participation in the Campus School Program.

*Action 5: We have published the aids needed to fit our in-service needs.* Every city has unique problems for which the standard answers are inadequate; New York City is no exception. Because we have the talent on which to draw and the resolution to draw it, we have published a number of aids to implement the in-service needs of our elementary teachers.

I mentioned previously that we published the course guides for our television in-service courses. To these I should add our recent booklet, *Sequential Levels of Reading Growth,* in which all the skills room teacher knows "what to teach next." We have supported this publication with a folder, called the *Reading Record Card,* which is designed to chronicle the progress of the individual child. Our pilot use of the card excites our optimism not only concerning the classroom usefulness of the card but also concerning the use of this device as an antidote to our mobility problem. We have also published two issues of a training aid entitled, *Teaching 600,000 Johnnys to Read,* in which teachers are given answers to such basic questions as "What is the place of phonics in the reading program?" "How should the basal reader be used?" "When and how should the alphabet be taught?"

In addition, we have been able to obtain and make available for conferences kinescopes of all our television programs. We have also produced two motion pictures that have been widely used in in-service reading courses even though they were designed for use in parent meetings, "Bienvenidos" and "The Parent's Role in Reading."

*Action 6: We have consciously involved many of our teachers in research projects.* These range from matters as technical as the use of the mirror in correcting instances of mixed dominance to matters as basic as alternative methods of using audio-visuals in support of reading instruction. Our projects are often oriented to reading problems even when the overall purpose may be broader. Our study involving team teaching, for example, includes heavy stress on reading improvement; and our projects in programed learning touch on all areas of the curriculum but particularly on reading.

One of our projects is still modest but has already received considerable national attention: a study of the possibilities of preschool training for socially-disadvantaged children. Working with children of four and five and their parents, we are undertaking to provide a reading-readiness background for children whose home environments are unlikely to provide it. We work for auditory and visual discrimination, concept formation, language development, vocabulary enlargement, basal experiences, and many other factors that incident to learning to read are classified by sequence and level so that the class must precede the successful introduction of reading.

### In Summary

When you have 600,000 children, when your leaders and associates are dedicated educators, when a need—in this case, for reading improvement—is incontrovertibly defined, you take action.

At first glance, each of the problems I defined at the outset—our teacher turnover, our pupil mobility, our numbers of socially handicapped, our one-in-eight non-English speaking children, our incredible range of abilities—seems insurmountable.

But when you dare to define publicly the depth of the need, when you dare to demand the wherewithal for counteraction, when you rally around you the forces that can be rallied, then no problem is insurmountable. We have a long way to go in New York City; but we are moving, and upward. We lack many answers in New York City, but we are learning answers that we did not know existed.

## 2. In-Service Education as a Continuing Need

MARGARET V. SUCSY

### The Need for Training

TODAY, with the demand for teachers so much greater than the supply, some teachers are entering their first classrooms with little or no training in the teaching of reading. What may be happening is that, thrown on their own, some of our beginning teachers are trying to teach reading as they themselves were taught. Yet, is it possible for them to remember how they were taught in the elementary grades, and, if they could remember accurately and with the mature insight of adulthood, would we *want* them to teach as they were taught?

Through a questionnaire study conducted of many candidates applying for teaching positions, as well as of many hired within the past two years, the following observations were made:

1. Many teachers are not required to take any courses in the teaching of reading during their undergraduate studies.
2. Many teachers had a course in reading which was combined with language arts.
3. Several had general methods courses which encompassed music, mathematics, and science, in addition to the reading and language arts. In these, only one or perhaps two class periods were devoted to the teaching of reading per se.
4. Teachers who were required to take a course in the teaching of reading reported that the greatest emphasis was on one of the following: children's literature, choral reading, setting up of an individualized reading program, phonics, word recognition, reading readiness, factors that hinder reading ability and standards for good oral reading.

### Questionnaire—Survey*

To what extent was theoretical information and practice teaching integrated? The replies ranged from "*not very much*" to "*none.*"

How many months of practice teaching were required? The replies ranged from "none" through "six weeks, ten weeks, three months, four months."

Did your college instructor in reading observe you teach *reading?* The replies ranged from "no" to "once," "twice" and one teacher had the good fortune of being observed three times.

The results of this questionnaire indicate that inadequate training of teachers appears to stem from one or more of the following inadequacies:

1. Sometimes colleges do not require a foundations course in the teaching of reading.
2. Courses offered in the teaching of reading often are poorly taught and sketchy in content.
3. Courses in the teaching of reading are often combined with language arts, mathematics, science, social studies, and music.
4. Practice teaching was often inadequate because it was not integrated with theory.

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*Austin, Mary C. *The Torch Lighters, Tomorrow's Teacher of Reading.* Cambridge, Mass.: Harvard University Press, 1961.

5. Some critic teachers were not master teachers with recent courses in the latest trends and thinkings in the teaching of reading.
6. Little or no cooperation between teacher training institutions and public schools used for student teaching.

**Recommendations**

1. Courses in the teaching of reading should be offered as separate courses and not integrated with other subject matter. It is impossible to offer a foundations course in reading and include mathematics, social studies and language arts, and do justice to all.

2. Every student teacher should be required to complete a course of at least six semester hours in the teaching of reading.

3. In-service courses in reading should be offered to all beginning teachers in order to better acquaint them with methods, materials, and the philosophy of the district of their employ.

4. Professors of Education, administrators, practice teachers and students must realize the importance of close cooperation, otherwise little can be accomplished to improve the preparation of teachers.

5. Teaching Centers or laboratory schools should be set up in the public schools to serve as practice schools.

6. More and better supervision for teachers.

7. Demonstration reading lessons by the reading supervisor or reading director.

8. In-service training for administrators, supervisors, practice teachers, in order that they may keep abreast of the times, and be in a more capable position to help their teachers.

In conclusion, may I state that it is my firm belief that, as Harrison and Gowin[1] assert in *The Elementary Teacher in Action,* "The quality of actual performance is directly related to the quality of preparation." I would carry this one step further; this preparation is a continuous process, an ongoing one, in which the teacher is always learning. It is wise and farseeing administration that provides for in-service workshops to supply the sources of knowledge and learning for which teachers, by their very definition, must hunger.

## 3. Using in the Classroom What We Know About Reading

MILDRED A. CARLSON

INSERVICE education should be able to help teachers with varied professional profiles in the same way a strong reading program should provide for individual differences in children. Believing that teachers have the know-how to teach reading and the capacity to develop true artistry in teaching reading, in-service education opportunities should help teachers use in the classroom what they know about reading instruction.

In-service education, if it is to effect a change in people, needs to have the same personalized significance for teachers as we expect classroom learning to have for children. In-service education should be personal experiencing in all its globularity and depth so that the teacher grows in the ability to recognize decision-points, to define productive purposes, to be aware of alternatives, and to develop inventiveness in methodology.

If we examine the multiple approaches used currently to encourage self-development, we might view them along a continuum from a "spectator activity" to problem solving experiences in the "arena of activity."[1] Conferences, meetings, extension courses *might be* a spectator activity creating reactions related to the performance of participants rather than a personal introspection of one's own behavior. Study groups, workshops, demonstrations, professional reading, research involvement, curriculum development *might lead* to exploration of new content to be covered, new understandings of children and how they learn, new ways of teaching, new materials that can be used.

### Quality Assessment

Under the leadership of the Curriculum Coordinating Council, each curriculum area is scheduled for assessment every five years. A reading study committee designed the plan for assessment of current status in reading. Objectives of an effective program were clearly defined; instruments to evaluate these objectives were selected or developed. Through the use of population samples representing the total elementary school population and including every elementary school at some grade level, all teachers became aware of the study.

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[1] Harrison, Raymond, and Lawrence E. Gowin. *The Elementary Teacher in Action.* San Francisco: Wadsworth Publishing Company, Inc., 1960.

[1] Ned A. Flanders. "Teacher Behavior and In-Service Programs," *Educational Leadership* (October 1963), page 26.

Test data were compiled, statistics computed, and significant data summarized in pictographs and tables for analysis by the Reading Study Committee and other elementary school personnel. A summary of observations and implications for the instructional program was prepared for the Reading Curriculum Committee.

### Curriculum Development

About one hundred elementary school principals and teachers from every grade level volunteered to be on the Reading Curriculum Committee responsible for the development of a revised *Guide to Teaching Reading*. Using the information gathered together by the Reading Study Committee and studying the writings of specialists in the field of reading, desirable outcomes for each of the major goals were outlined, then further delineated as to desirable outcomes at several developmental levels. Selected writers for each of these levels developed the content of the guide. A preliminary copy and more recently a tentative manuscript have been submitted to committee members and faculty groups for reactions and suggestions.

### Resource People

*Resource Teachers in Reading.* During this time the *Guide to Teaching Reading* is being developed, two master teachers on special assignment are on call to teachers or faculty groups. They may discuss instructional approaches with individual teachers, grade level groups, or a total faculty. Specific approaches may be demonstrated and followed by conferences. Reading disabilities of specific children may be diagnosed and appropriate adjustments in materials and methods explored with the classroom teacher.

*Building Resource Teachers.* Several elementary school staffs in disadvantaged areas of the city have an unassigned teacher who serves as a resource teacher. The role in relation to reading instruction has included: demonstrating for the classroom teacher, helping to provide appropriate materials, suggesting teaching approaches, diagnosing needs of specific children and trying out some teaching approaches with them.

*Helping Teachers to New Teachers.* Through our new teacher orientation program, Helping Teachers provide or arrange for three types of services. They spend a half-day about once a month in the new teacher's classroom; they may demonstrate reading techniques using multiple materials in a variety of organizational patterns.

### In-service Education Meetings

*District Meetings.* All elementary school teachers had an opportunity to attend a district meeting on released time with the focus on reading. Aids to diagnostic teaching were discussed. In subgroup meetings, teachers pursued topics, such as, developing reading foundations, word recognition abilities, study-skills, or skills of creative and critical thinking; providing challenging independent activities; extending reading interests; assisting the delayed reader.

*Faculty Meetings.* Some faculties selected reading as their area of study for one or more of a series of four meetings on released time.

### In Summary

Teachers are aware of the complexities of differentiation of instruction to meet children's needs and some ways in which these needs can be met or appropriate challenges provided. The implementation of these ideas into classroom practices may be encouraged (1) by participation in the assessment of the quality of the instructional program, (2) by involvement in the development of curriculum materials, (3) through the help of resource teachers, and (4) through directly planned in-service education meetings and study opportunities. A new idea, time for contemplation, a chance to observe another teacher may be the impetus a teacher needs to develop from a "knowing" level to a "doing" level.

## 4. Developing Teacher Awareness of Specific Oral Reading Errors

J. PHIL ROBINSON

AN IN-SERVICE project was conducted to facilitate the developmental increase of teacher awareness of specific oral reading errors. A consideration of the following items led us to focus our attention on oral reading for the in-service project: (1) Many of the data used by a teacher to evaluate a primary grade child's reading progress are collected in oral reading situations. (2) Teacher assessment of oral reading errors simultaneously measures two areas: the child's oral reading and the teacher's listening abilities. (3) Increased teacher knowledge of optimally appropriate corrective techniques for the most frequently occurring oral reading errors would improve the quality of their classroom instruction. (4) Many teachers experienced difficulties in expressing the particular problems present in the reading patterns of children they were placing in corrective instructional programs. (5) A group of these teachers requested the reading consultant to explore some of the relationships between clinical diagnosis and classroom instruction as an in-service project.

### Phase One: Developing Training Materials

Four items were produced for this in-service project:

1. Tape recorded samples of oral reading errors for six previously diagnosed children. (Durrell Analysis of Reading Difficulty and/or Gates Reading Diagnostic Tests were used. The cases selected were judged to be representative prototypes of reading skill deficiencies and were sequenced in order of their complexity.)
2. A standardized notation system for recording oral reading errors.
3. Practice sheets. (These were copies of the paragraphs read by the six children.)
4. A self-scoring key for each of the six cases. (This key was independently cross-validated by two reading specialists with clinical experience.)

### Phase Two: Listening and Error Noting Sessions

Participants became familiar with the content of the recorded paragraphs and learned the error-noting system prior to attending these sessions. A tape recorder with eight head-sets was used for all listening sessions. As each teacher listened to the tape, he or she noted errors on a copy of the paragraphs being read. After listening to each paragraph, each teacher compared his or her noted errors with the key. Teachers were not asked to report the results of this comparison.

Time for individual listening to the tape was also provided. Teachers used this to listen to the tape while observing the key or to listen again to sections containing errors they had been unable to hear or note during the first playing of the tape.

### Phase Three: Lecture-Discussion Sessions

Four such sessions were conducted to relate achieved teacher awareness of oral reading errors to broader areas of the reading process. These related topics were explored via lectures, discussions, and reading from professional publications.

Here are some typical topics from this phase of the project: basic principles of diagnostic reading analysis, remediation and corrective teaching techniques, language patterns and selected linguistic concerns, comprehension skills, silent reading, and implications for grouping practices and classroom instruction.

### Phase Four: Application of Achieved Teacher Awareness

Most of the participants have used the notation system and their increased awareness in completing an informal diagnosis of several children in their own classrooms. One or two have attemped the administration of a complete diagnostic test battery.

With the help of three teachers, materials are being prepared by the reading consultant to apply the error-recording techniques to group instructional situations. Plastic overlays for recording errors while a child reads from text material and group-centered check lists are in preparation.

**Phase Five:**

**Outcomes and Splash Effects**

1. Summer school referrals to corrective programs are expected to be made with more precision by participants.
2. Teachers report a greater appreciation for the work of reading clinicians and are better able to integrate diagnostic, remedial suggestions in their classroom teaching.
3. Two participating teachers plan to specialize in clinical work. They are starting their graduate programs this summer.
4. Several teachers are using much more flexible grouping procedures in their self-contained classrooms.
5. One of our team-teaching schools has developed a "Target Teaching" reading program. Based upon principles from this in-service project, "Target Teaching" organizes instruction in a manner that maximizes staff skills and combines efficient use of instructional time with individually identified strengths and weaknesses of children.
6. The pre-service possibilities of the training techniques are being explored. Two universities in our area are interested in developing a similar training program.
7. Since the beginning of this project, the listening-error notation tapes have been tried with several elementary principals. Plans are underway to organize a similar project for administrators. Two goals for this program have been established: to aid the principal in evaluating primary grade reading observations and to increase the principal's insight into reading skill development in the primary grades.
8. Some teachers are now bringing tape recorded samples of children's oral reading errors to conferences regarding instructional techniques and materials. Frequently, they have done an excellent job of analysis and have translated emerging error patterns into well-defined instructional needs appropriate to the child.

Planning and conducting this project have been challenging and interesting educational experiences. Perhaps next year we shall be able to extract hypotheses for testing from this experience and convert our current challenges and concerns into a research design to formally evaluate the utility of this training approach.

## B. JUNIOR HIGH SCHOOL

### 1. Class Activity in Pre-Service Education

WALLACE RAMSEY

IN *The Torch Lighters,* Mary Austin and her group have suggested that it is "unfortunate that few prospective secondary school teachers receive any instruction in the teaching of reading that will enable them to provide adequate guidance for their pupils." Their ninth recommendation is "that a course in basic reading instruction be required of *all* prospective secondary school teachers."

All over the nation colleges and universities are implementing this recommendation and several State Departments of Education are requiring a course in reading methods of secondary teachers before they can be certified.

As a beginning step in such a course a quick and cursory study of the general nature of the reading process from the psychological, physiological, and sociological viewpoints is important. The same kind of study should be made of the elementary school program in teaching reading. In the study of the first of these two topics, there are no adequate substitutes for reference reading and class discussion. There are several good films to use in studying the second topic.

**Learning About Skills Teaching**

A strong familiarity with techniques involved in teaching skills of word perception and interpretation is needed by the prospective secondary teacher. A careful examination of the guidebooks designed to accompany the better elementary reading series will give a student an understanding of one or two viewpoints concerning the manner in which these skills can be developed.

The writer has prepared a series of

laboratory exercises for use in reading methods classes. One exercise among these outlines the steps students should take in studying the nature of a good word perception program and details the steps to take in "teaching" a word perception lesson to classmates as the culminating activity of the study. Students use *The Word Recognition Program* (Published by Ginn and Company) as a guide to understanding the sequence of development of word perception skills and as a source of lesson plans for teaching them.

A similar approach is used to help students become familiar with the methodology of teaching the aspects of reading relating to comprehension, interpretation, creative and critical reading. The performance of any laboratory activity should be preceeded by the study of the professional literature relating to the topic.

### Becoming Familiar with Teaching Materials

Ten years ago there were few problems in helping students become acquainted with teaching materials for use in junior high school reading because there were very few available. Today a careful examination of a book like Spache's *Good Reading for Poor Readers* (Garrard Press) reveals the existence of many such materials. The use of such an annotated bibliography will furnish a teacher with information about skill building materials, reading games, adapted and simplified materials, trade books, book clubs, references on readability, and the use of books to help children solve their problems.

The existence of a curriculum laboratory or reading center library containing curricular materials (including textbooks and references) is highly desirable. When students examine materials for the purpose of evaluating and extensively describing them to classmates, their understanding of the materials is greater and the tendency to request and use them in their teaching is enhanced.

Multiple copies of junior high school reading textbooks enable professors to direct a careful examination and class discussion of the salient features of the material. Careful study of the material under the guidance of one who knows it well will reduce the tendency of teachers to use materials in a sloppy manner.

Despite efforts of the National Council of the Teachers of English to re-direct the objectives of English teaching in American high schools, the goals of classroom teachers of the language as they refer to reading remain about the same: to help all children know and understand certain "classics" or "masterpieces" of American and English literature. Most teachers direct their energies to attain this goal and similar ones, and the literature textbook is their chief tool for doing this. Ability grouping in our high schools has grown as consolidation has increased and the high school has come under the influence of such modern reformers as James Conant. Such ability grouping tends to entrench the use of the literature textbook.

With the above facts in mind, pedagogues who teach reading methods need to help future teachers understand how good reading instruction can become a part of good literature instruction. A study by the writer illustrates the effectiveness of teaching reading skills while teaching literature. The use of a directed reading lesson plan (as outlined in any good basal reading series) in teaching literature produced significant gains in reading while literature goals were being promoted.

When the use of the directed reading lesson plan is coupled with the careful use of skill building materials, the growth in reading is marked. No amount of machine oriented "developmental reading" can rival the effectiveness of such a program in improving understanding.

Comprehension skills can be improved by carefully posing searching questions to use in setting reading purposes. The difficulty of such questions in any class should be varied to suit the varying student abilities which teachers find in even ability grouped classes. In the discussion step, the questions can be directed at specific students. In this way, all can contribute and learn.

### Activities for Content Area Teachers

Teachers of content area subjects can profit from the application of something like a directed reading lesson plan to their textbook assignments. (We can hope that the millenium will soon arrive when the approach to teaching science, history, home economics, etc. will become more multi-sensory and multi-level but textbook teaching is still very much in vogue.)

Many will scorn such a plan, however, and make a plea for students to be more independent in their reading. To such future teachers the writer commends the use of devices like the *Survey Q3R* or *OK4R* method proposed by Walter Pauk. Such a device does not simplify the material but makes the reader more efficient by alerting him to useful cues in the material.

### A Final Word

Implied in all that has been said above is the proposal that courses which seek to prepare teachers of reading should go beyond having them read and discuss authoritative opinion *about* teaching and include a handling and careful study of the materials *of* teaching. The professor in such a course will play various roles. He will often *inform* his students and explain things to them but he will not hesitate to substitute student action for professional garrulity when course purposes are best served by such substitution. Too many of us are charmed by the sound of our own voices and like the Lorelei of German literature lure our students to crash on the rocks of verbalism. By permitting them to put out to sea and by guiding them to seek their own answers they may find greater understanding and skill in dealing with the reading problems they will face.

## 2. Organizing an In-Service Program for Effective Reading Instruction in the Junior High School

CHARLES T. LETSON

SINCE any in-service program to improve reading at the junior high school level will in all probability be dealing with subject matter teachers who have had little or no training in how to teach reading, it is important that the organization of such a program be carefully planned. It takes time to develop which often means planning as much as two years in advance of the actual program. The initial idea may come from the administration, the staff, or the reading consultant; but once this has been planted, only logical and planned procedures will see it through to a successful conclusion.

Of the three major factors involved in an in-service reading program—the administration, the faculty, and the reading consultant—the administration plays a vital role. Recognizing the need for such a program, it is the responsibility of the administration to launch, encourage, and support its every move. This should be in the nature of moral support as well as material. The administration, or those charged with the responsibility for in-service programs, should plan with the reading consultant or coordinator for the most effective approach to organize the program so that it will enjoy the support of the teachers who will be involved. This may be achieved best through a preliminary testing of reading ability and/or conducting a reading survey. Results of these studied by a faculty reading committee will provide ample evidence of the needs and furnish the base upon which the in-service program can be built. The administration would no doubt have the support of the board of education and might do well to enlist that of the parent groups as well. In the area of material support, the administration should plan for adequate supplies, room, and time to carry out the program.

A cooperative faculty is a most important factor if the program is to function effectively and provide improvement in reading in the various content fields. One way in which to accomplish this is to provide the maximum in better working conditions — flexibility of the program, ample time to carry it out as well as appropriate hours (not after school or Saturday mornings), practical demonstrations, team work, visitations, small-group meetings, individual participation, etc. Important, too, are the proper attitudes, for the tendency is, for teachers at this level, to resist reading instruction in their subject classes. Teachers must be convinced that the program is theirs and that they are at least helping to install it as well as direct it; to feel that it was being imposed on them would be to doom it before it got started. Teachers must also be convinced that such a program would improve the quality of their teaching, of pupil learning, and would not deprive them of precious time that would be spent better on content.

The one person whose job it is to maintain administrative support and to keep the staff happy and convinced is the reading consultant. His leadership and guidance are absolutely indispensable. He must have patience, tact, enthusiasm, sympathy, knowledge, as well as ability to direct the program at every turn. If he is clever, he will be the instigator and the supervisor and will determine what type of program is best and how it should be implemented, but he will remain in the background as much as possible, all the while convincing administrators and teachers that they are the ones who are deciding and leading the program. Whether he is a member of the school reading committee, or the advisory staff, whether he is meeting with departments, or small groups, or individual staff members, he is always coordinating the entire program. The others involved have further responsibilities and interests to attend to; he has but one—the successful carrying out of an in-service program. To accomplish this, he must depend on good organization, as well as coordination.

## 3. The Consultant in In-Service Teacher Education

BERNARD R. BELDEN

EVEN IF colleges and universities did provide the necessary pre-service education programs to meet the needs of secondary school teachers, the need for in-service programs would diminish only slightly. The lack of training of the tenured staff, the mobility of staff and the additional influx of the inexperienced would require aggressive in-service teacher education efforts to make effective progress in improving or even maintaining the quality of reading instruction.

The reading consultant has an unique task in providing the resources for staff study and continuity in the reading program of the secondary school. To do this he must have a broad background of experience and education. In addition to the skills possessed by the reading teacher the consultant must be able to perceive the total picture of reading in the local situation, including local resources, and provide guidance in program development consistent with the national trends.

We can evaluate the importance of the in-service education role of the consultant by noting the level of pre-service training secondary teachers have had. In a survey of 570 secondary teachers McGinnis[1] reported that less than 10 per cent received any instruction on how to teach reading to high school students. Approximately three-fourths were taught to expect a great range of reading ability within a given grade, but only one-fifth were shown how to adjust reading materials to the reading levels of their students. Her full report effectively documents the shortcomings in the preparation of secondary teachers for reading instruction.

In spite of the deplorable lack of pre-service education in reading it is probably true that nearly 90 per cent of all study activities in the academic subjects in high school involve reading. In addition, it must be kept in mind that the high school population has made the teaching of reading a very complex task. There are remedial readers, both those reading below grade placement who are comparatively easy to locate, and those able youths working below their own potential but reading at or near grade level who are not so easily identified in our classes; developmental readers whose progress is normal but who require continuous instruction in the new reading tasks of the high school program; and, the able readers whose proficiency is so high that reading instruction is erroneously assumed not to be necessary.

The staff that understands that every teacher utilizes reading for learning, rather than "every teacher is a reading teacher," is best able to profit by the services of a reading consultant in solving specific problems. The consultant then can provide:

1. Guidance in developing the objec-

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[1] Dorothy J. McGinnis. "The Preparation and Responsibility of Secondary Teachers in the Field of Reading," *The Reading Teacher*, 15 (November, 1961).

tives of reading instruction.

2. Guidance in identifying the reading characteristics of the students.
3. Guidance in the development of the concept of diagnostic teaching.
4. Guidance in the development of the concept of differentiated instruction.
5. Instruction in the area of teaching reading skills.
6. Instruction in reading skills in the specific content areas of the teachers.
7. Interpretation of the research and the body of knowledge in reading for effective decisions concerning curriculum methods and materials, as well as current controversy.
8. Guidance in developing structure for the evaluation of the reading instruction program.

These are the major functions the reading consultant has to perform. The nature of the school staff, their training and experience, will determine the nature and scope of the in-service training the consultant will provide.

## 4. Promising Practices in Reading at the Junior High School Level

LEONARD W. JOLL

IN CONSIDERING promising practices in reading at the junior high school level I would like to divide this presentation into two parts. The first will cover actual programs which I have seen in action. The second part will cover some of the practices reported in the literature.

### Actual Programs Observed

Several years ago I was requested to visit the Wooster Junior High School in Stratford, Connecticut. This is a school of approximately 1200 pupils representing a good cross section of socio-economic families. The principal of this school, not only has a testing program on paper but one that is in action. He makes excellent use of test results and tries to develop a program which he and his faculty feel will meet the needs of all of the pupils of the school.

Test results in this school indicated that there were a number of pupils with average ability or better who were down in their reading. The principal felt that the employment of a full-time reading teacher was a must. He also believed that the reading program must involve all of the teachers of the school. He, therefore, developed a general education program for all pupils. There were 18 teachers who were classified as general education teachers. These teachers were responsible for language arts, spelling, reading, and social studies. The pupils would have separate teachers for mathematics, science, shop, physical education, art, and music. To insure that the program would be well integrated with the reading program a full-time curriculum coordinator was employed. This person worked closely with the special teacher of reading, the general education teachers, and the other area teachers. The result was that each teacher was made very much aware of the entire program. The pupils were offered a full program. Special skills in reading were continued in all of the classes so that the pupils never felt that they were given one level of instruction in reading and then were experiencing different levels in the other areas.

The second program I would like to describe was set up in Southington, Connecticut. The principal of one of the schools, which included some seventh grades and all eighth grades of the town, stated that if it were possible to get special help for some of the eighth graders, it might be possible to get them over the hump of the first year in high school. Following this, all principals were requested to recommend seventh grade pupils who they thought might profit by such an experience. The result was that 47 pupils in grade seven were recommended. A complete testing program was carried out for each of the 47 referrals. This consisted of an individual psychological test (*The Wechsler-Bellevue*), an individual reading inventory, a word recognition test and a spelling test. After a considerable amount of discussion the following criteria for selecting students were set: (1) The group would contain no emotional problems; (2) No one with an IQ of less than 100 would be admitted; (3) The general attitude of the pupil would be given prime consideration. On the basis of these criteria the group was narrowed down to 15 boys. The highest reading achievement score of any of the boys was highest fourth grade level. The lowest was on the pre-primer level. After a considerable search we were able to employ a teacher with five years experience in elementary teaching.

The group of fifteen boys were to be taught in a self-contained class, with the exception of physical education, music, and art. A special conference was held with each set of parents. This program lasted for an entire year. The average gain made by the group for the year was 3 years, 2 months.

## A Review of Literature

A review of the literature indicates many promising practices. Perks (*4*) states that the classroom teacher in the junior and senior high school is in the most favorable position for helping a student develop the desire to read. The torrent of paperback books pouring from the nation's presses now makes it possible for every junior and senior high school classroom to have on hand a small library closely connected with the subject matter being studied. In an article appearing in the summer issue of the *Journal of Developmental Reading*, 1962, Stanchfield (*6*) suggested that the problem of securing more materials for instruction based on the interests of poor readers could be solved if teachers would take time for writing books adapted to the needs of their students. Strang (*7*) noted additional trends in the teaching of reading at the secondary level. These trends include the following: (1) an increase of in-service training in reading for high school teachers; (2) a change in the role of the reading specialist from remedial teacher to a consultant for other teachers, and (3) an increasing demand for reading consultants at the junior and senior high school levels. Cobb (*2*) describes a club formed by ninth grade boys who were severely retarded in reading. Ganley (*3*) investigated the effect of three months' training in specific study skills on the reading achievement of 40 students in Grade VII. The results indicated that although the experimental group made significant gains in study skills ability, there was no statistical difference between their gains in reading and the gains made by the matched control group. Brazziel and Gordon (*1*) reported an interesting and successful program carried on at Norfolk, Virginia with children who came from culturally disadvantaged homes.

A list of sixty-six studies in secondary reading has been classified in the autumn issue of the *Journal of Developmental Reading*, 1963 (*5*). There are many interesting and promising practices in reading now being carried on in junior and senior high schools over all our country. If the report of a promising program has an appeal, examine it carefully. Make use of the parts that will fit into your specific program. Don't be discouraged if at first the program is not a huge success. Have faith in your own endeavors and in time you will contribute a promising practice.

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# C. SENIOR HIGH SCHOOL

## 1. A Reading Center Approach to In-Service Education

CLARICE STAFFORD

SINCE the teacher is the key figure in the process of guiding the learning experiences of the children in our schools, provision for teacher growth is an integral part of curriculum development and improvement. Instruction in and through reading plays a major role in the curriculum; and it is for this reason that school systems have found it both necessary and desirable to initiate in-service education programs in the teaching of reading to foster this growth.

The Livonia public schools inaugurated a unique in-service education program in April of 1959 by establishing the Reading Center. The Reading Center was established for these reasons:

1. In a rapidly growing suburban school district, there are many new teachers entering the profession who have had limited experience in teaching children to read.
2. Experienced teachers should be provided an opportunity to study current research findings, new methods and materials, and varied organizational plans in order to gain new insights in developing their reading programs.

. Teachers need time, unhampered by classroom responsibilities, for additional experiences in professional study, preparation of instructional materials, and the teaching of reading.

4. The in-service education program will provide professional preparation for special reading teachers, needed in secondary as well as elementary schools.
5. Many children who have reading difficulty are in need of special diagnosis and instruction which is beyond the present understanding and available time of the classroom teacher. The Reading Center would employ special reading teachers to offer small-group instruction to children in need of this help.
6. The improvement of reading instruction can be developed on a system-wide basis within the context of the total curriculum.

### Major Objectives

The learning experiences for teachers and pupils attending the Reading Center are planned cooperatively by the Coordinator of Reading Instruction, the administration, and the workshop participants. The major goals of reading instruction, the school philosophy, and the needs of the learners served as a guide in developing the following major objectives:

1. Understanding the nature of the learner and the reading processes.
2. Understanding the elements of a balanced reading program.
3. Gaining skill in developing, administering, and interpreting formal and informal diagnostic tests to determine instructional needs of pupils.
4. Acquiring a knowledge of the basic reading skills (word attack, vocabulary, comprehension, interpretation, work-study and rate).
5. Developing skills and abilities necessary for teaching reading.
6. Developing skill in identifying and teaching the reading skills necessary for efficient reading in the content areas.
7. Understanding the major role of appreciation, interest, and personal and social adjustment in modifying pupil behavior in the reading program.
8. Gaining familiarity with professional and instructional materials related to reading instruction.
9. Gaining skill in adjusting and organizing reading instruction to meet the wide range of individual differences.

### Operational Plan

Classroom teachers submit applications to attend the Reading Center, and workshop participants are selected cooperatively by the local building principal and the Coordinator of Reading Instruction. Teacher interest, need, and leadership ability and instructional needs related to ongoing curriculum development are factored into the final selection. Special Reading Center substitutes replace the classroom teachers for a period of three weeks to enable them to work full time at the Center. The present schedule includes five workshops during the school year with eight to ten teachers attending each session.

The Center has a list of pupils who need special reading help, compiled from referrals and testing completed by reading staff members and classroom teachers. Pupils evidencing varying types of reading difficulties are selected from this list for additional diagnosis and remedial instruction at the Reading Center. Teachers attending the Center work with one pupil for an hour each day.

Work with the pupils provides a laboratory situation for teachers to have direct experience in administering and interpreting individual diagnostic tests. At the same time, new methods and materials of instruction are developed, utilized, and evaluated in a "real life" situation.

Using the techniques developed for individual diagnosis and instruction, inservice experiences for small group and total group instruction have been developed. The group informal reading inventory, standardized tests, directed reading activities, and organization for instruction stressing both vertical and horizontal development of learning experiences are discussed, demonstrated, and utilized. Small groups of pupils are brought to the Center, and teachers return to their classrooms at various times during the workshop in order to combine theory and practice.

Learning experiences to implement objectives previously outlined are centered around professional reading, group discussion, individual and group presentations, conferences, field trips, review of instructional materials, and the development of a reading file. An informal, flexible organizational plan enables the teachers to pursue individual needs and interests as they perceive them.

## 2. The Use of the Weekly Conference in Preparing Teachers of Reading

JOSEPH P. KENDER

IN 1956, three years prior to the mandate that reading be taught in grades seven and eight in Pennsylvania secondary schools, the Paoli Area High School System added a program of reading instruction to the secondary school curriculum. The absence of personnel specifically trained in the area of reading was a major problem; however, Adele Halas, present reading coordinator at one of the two junior high schools in the district, undertook a program designed to provide her with the background necessary to direct an in-service reading program. At the same time, the assistance of several members of the Reading Clinic of the University of Pennsylvania, Doctors Ralph C. Preston and J. Wesley Schneyer, and Mrs. Elizabeth Wilson, was secured on a consulting basis for the school year 1956-57. These early steps were instrumental in providing a program of reading instruction which has had considerable success to the present day.

It was decided that because of the lack of trained reading personnel, the utilization of English teachers to teach large groups, with assistance from the reading coordinator, would best meet the needs of the school system. Certain minimum requirements had to be realized: first, that the English teachers would have to be instructed in the areas of reading skills peculiar to the junior high school which, in reality, included the entire range of reading skills since a given junior high school class, in some instances, represents the entire range of abilities and reading achievement levels; second, that time would be allotted so that such a program of instruction could be initiated (since the English staff was expected to assume a new reponsibility, it was thought that the proper time for such instruction was during the school day); and third, that sufficient materials could be purchased to meet the needs of all the students.

Furthermore, four workshops by visiting specialists were conducted which coincided with periods of rapid expansion of the school system during the past eight years. Two such workshops were conducted by Dr. Morton Botel, one by Dr. M. Jerry Weiss, and a most recent one by Dr. Ethel S. Maney. Although these workshops were brief in duration, they succeeded in providing an insight into the scope of the reading program. Obviously, the program had to be continued in depth in each specific area over a period of time.

One period a week for each grade level was scheduled so that the English teachers could meet with the coordinator for the entire school year. This time was allotted during the school day as part of the teaching load. In addition to these scheduled meetings, the reading coordinator was available for individual or group conferences whenever these were necessary. This could be effected quite easily because of the fluid nature of the coordinator's schedule.

On the basis of teachers' needs and the observations of the visiting specialists and the school coordinators, instruction was undertaken in the following areas: the nature of the reading process; instructional methods such as directed reading activities and the teaching of word attack skills, vocabulary skills, and comprehension skills, as well as study skills; grouping procedures and evaluation of reading performance; independent reading activities, and the selection of materials for instructional and recreational reading, among others.

The program, at the present time, is being expanded to include content teachers who will meet with the coordinator for regularly scheduled conferences in the manner detailed above. The areas of concentration will center around problems in the specific content areas as well as general reading skills.

Obviously this is only one method of providing in-service education. The program has had considerable success as is evident from both teacher observations and academic records of the end product, the achievement of the students who have been taught by teachers whose reading backgrounds have been provided to a great extent by the program of in-service education. Some staff members have been motivated sufficiently to seek additional work in reading at the university level.

The following recommendations, it seems, are in order:

1. The program must have the complete support of the school administration. Ideally, it should be initiated by the administrative officers. If this is not the case, a good sales job is in order on the part of the reading specialist.
2. Time for in-service education of this type must be allotted during the school day. In addition, the teacher's load should be adjusted so that the in-service program is not an added burden to an already over-worked individual.
3. Sufficient funds must be made available to meet the needs of all the students regardless of level of achievement. This precludes a most comprehensive program.
4. A reading specialist must direct the program.
5. Class size must be kept to a practical minimum.
6. The program eventually should include the teachers of content areas.
7. The recommendations that state requirements for elementary and secondary reading teachers be increased should be enacted at the state level.[1] On the basis of the background provided by such a mandate, in-service education then could be utilized to refine the skills of staff members and to assist them to grow professionally.

## 3. The English Teacher as a Teacher of Reading

OSCAR M. HAUGH

WE CERTAINLY would be "carrying coals to Newcastle," or in this setting, "to Pennsylvania," if we were to argue at an IRA meeting for the teaching of reading in the junior and senior high school. However, opinions begin to differ widely when we discuss the role the English teacher should play. The continuum of opinion varies from "Let a reading specialist do it," to "Isn't the English teacher supposed to teach all the necessary reading skills?"

Let us turn from the realm of opinion,

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[1] Sheldon Madeira. "Reading in Pennsylvania Schools," *The Reading Teacher*, XIV (May 1961), 317.

which is one of the cheapest commodities on the market these days, to research. Two studies completed at the University of Kansas last year provide answers to the question, "What is the role of the high school English teacher in the teaching of reading?"

Mrs. Mary Wood[1] concentrated on the teaching of literature in her eleventh grade English classes for two semesters but made no attempt to teach any of the skills in reading. She gave standardized tests in reading, prose appreciation, and literary knowledge in the fall and again in the spring to measure progress. She found the students gained significantly in literary knowledge and appreciation. The gains in reading skills were so small that they were not significant, statistically.

For a single semester, Miss Elizabeth Webster[2] taught reading skills relating to vocabulary development, comprehension, and critical reading in conjunction with the program in literature in a tenth grade English class. Then she selected, as a control group, individual students from other tenth grade English classes who followed the regular school program. She paired them with the students in her experimental class in IQ, previous marks in English, and scores on two standardized tests: one in reading and one in prose appreciation. When the students were retested at the end of the semester both in reading and in prose appreciation, the gains of the experimental group were statistically significant while those of the control group were not.

The findings of both studies clearly support each other: if no instruction is given in the skills of reading in the English class, only slight gains in reading will result, but when instruction is given, even over such a short period of time as one semester, the students will improve significantly.

Unfortunately there are English teachers who insist that they are teachers of literature but not of reading. These two studies clearly show, however, that the English teacher *must* teach reading in his classes if he is going to do justice to his students.

We are fortunate that all over the United States more and more colleges and universities are adding courses in teaching reading in the high school. My own university is in its second decade of instruction and there are other universities that have been teaching courses like this longer than we have. In addition, many public schools have developed in-service programs, scheduled workshops, and established extension classes to provide the training needed.

However, some teacher education institutions have not provided instruction in the teaching of reading for they have heeded the critics who loudly proclaim that teachers are required to take too many methods courses and adding another would be unthinkable. Even under this type of handicap, there is nothing to prevent a restructuring of the English methods course in such a way that the teaching of reading becomes a major unit of instruction. Fully as important is seeing that prospective teachers have the opportunity to try out what they have learned in such a unit during their student teaching internship. The follow-up seminar is another place where study can be continued and additional insight gained. Obviously, learning how to teach reading is too complex to be accomplished in a single or double exposure.

What we must all realize is that the teaching of reading in the high school is similar to what Goethe said over a hundred years ago of the act of reading itself: "The dear people do not know how long it takes to learn to read. I have been at it all my life and I cannot yet say I have reached the goal." Truly, there are skills in reading which we haven't even discovered yet, just as there are more effective ways of teaching those skills that we have known about for a long time. Our job is to continue the search. Like Goethe, we certainly have not reached our goal; we have barely begun.

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[1] Mary Wood. "An Experiment in Teaching Literary Comprehension and Appreciation in the Eleventh Grade." Unpublished master's thesis, Graduate School, The University of Kansas, Lawrence, 1963.

[2] Elizabeth Webster. "A Single Semester Experiment in Teaching Reading Skills in a Sophomore Literature Class." Unpublished master's thesis, Graduate School, The University of Kansas, Lawrence, 1963.

# SEQUENCE XII
# LINGUISTICS AND READING INSTRUCTION

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## A. ELEMENTARY SCHOOL

### 1. An Approach to Better Reading Through the Recognition of Grammatical Relationships

ROBERT L. ALLEN

ONE OF THE first stages in a child's reading—if not *the* first stage—is that of recognizing and pronouncing words. But the mere recognition of words is not reading. Reading is finding out what sentences say. For this reason, most first grade readers introduce words not as individual items but as parts of sentences. In the introductory stages, these sentences are usually simple, short sentences, of the kind children might say themselves—sentences like *Fluffy is a cat* or *Fluffy has three little black kittens.* Even if a child reads each sentence word by word rather than as a total unit, it is still likely that he will be able to grasp the meaning of the whole sentence if he knows the individual words.

Nevertheless, although the child may be able to "get the meaning" of a short, simple sentence as a result of reading each word separately, this kind of word-recognition will not enable him to understand more complicated sentences. To be able to read such sentences intelligently, he must be able to recognize the positions that the different words occupy, and the structure of each sentence.

There is little difficulty in recognizing the structure of sentences like *Fluffy is a cat* and *Fluffy has three little kittens.* The one most important relationship in English is that between a subject and its predicate. In each of these two sentences the subject is a single word. Consequently it is easy to know when one has crossed the all-important border between Subject-Territory and Predicate-Territory. But when the subject is long and complex, and particularly when the subject itself includes verbal material, children find it much more difficult to grasp the structure of the sentence without special assistance or training. For example, one kind of subject that is likely to cause difficulty in reading is a subject containing participles (e.g., *The tall girl with red hair sitting near the window* is named Linda.) And yet the use of so-called participial phrases is one of the distinctive features of formal written English. This difficulty becomes compounded when the participle involved is the past participle of a regular verb (and therefore has the same form as the past tense form of the verb). Even a good reader, for example, might start out by reading the following sentence as if its subject consisted only of *the old woman*: The old woman called Penelope . . . Yet the words following *Penelope* might force a re-reading and re-analysis of the whole sentence, as in this example: The old woman called Penelope was a witch.

A child is not really able to read intelligently, therefore, until he is able to grasp the signification of specific words occurring in specific *positions* in specific *sentences.* The mere recognition of individual words is not enough.

What is needed is a type of English grammar which can be taught fairly easily in the lower grades, one which will help students to recognize the *sentence-units* in the more complicated sentences they are destined to meet in their reading. Above all, such a grammar must *not* be a grammar that emphasizes *words.* It must be a grammar that teaches students to regard a sentence as a hierarchy of *constructions within constructions,* on different levels, rather than as a string of words in linear sequence.

Unfortunately almost all the grammars now available emphasize words rather than larger constructions. But at Teachers College, Columbia University, we have been working on a different approach to English grammar, an approach that emphasizes *positions*, especially the positions on the sentence level. These positions we call "sectors," and this kind of sentence analysis we call "sector analysis." After identifying the sectors, we examine the different positions *within* various constructions, on lower levels. We turn to the analysis of the parts of speech last, if at all.

The basic linguistic concepts involved in sector analysis—other than the concepts of different levels or "layers" of structure,[1] and of positions on the separate levels—are the analytical techniques of "shifting" and "dropping." These techniques cannot be adequately demonstrated within the limited space of an abstract.[2] However, when presented step by step, sector analysis is remarkably easy to teach in its initial stages, since it is based upon the feeling students already have for English as native speakers of the language.

Sector analysis promises to be a useful way of teaching students to recognize the most important units in a sentence. It enables students to recognize the boundaries between sentence-units on the basis of syntactic signals—*as every good reader must.*

## 2. A Linguistic Approach to Beginning Reading Based Upon Fries' Principles

ROSEMARY G. WILSON

WHY LOOK for another method of teaching beginning reading? The answer is quite simple, I think, if your work in this field has always been one hundred per cent successful, if all the pupils with whom you had personal or more remote contact went through the grades as effective and high achieving readers, and if retarded readers or clinical cases in reading were unknown. The answer in a situation such as this is that there is no need to consider another approach to the teaching of beginning reading. No one argues with success. He accepts it gratefully and continues the kind of program which has proved rewarding.

My own experience, however, has been quite different from this, both as a classroom teacher and as a supervisor of reading in a large city school system. Though I have had my share of success in teaching reading at various grade levels, the question "why" loomed larger and larger as the years went by about those children whom no teachers seemed to be able to reach effectively. The question reached gigantic proportions indeed when, as a supervisor on a city-wide basis, I began to get a true picture of the scope of the "reading problem" particularly at the junior and senior high school level. Just at the point when it seemed logical to assume that we would be reaping the benefits of the reading program of the elementary years, we were presented with the discouraging prospect of hundreds of retarded readers, some of whom might have to start almost at the beginning in reading while others would take the easy way out as drop-outs and chronic truants. Coupled with this problem were the reports coming from our own public schools' Reading Clinic which indicated, along with many other deficiencies, an almost total lack of competence in word attack, particularly in the area of phonetic analysis. It seemed obvious because of these situations that a critical appraisal of beginning reading was the logical place to start to lay plans for a preventive program. To condense several years of close observation of techniques at this level into a brief statement is difficult and involves the danger of over-simplification. However, it should be sufficient for our purpose here to say that many grave questions were raised in my mind concerning the readiness activities and the all-important point at which these merge into the introduction of formal reading. I was disturbed by a vagueness in the minds of many teachers about this crucial period with the result that a few children were rushed headlong into books but many, many more were spending protracted periods of time in readiness activities of doubtful value. Added to this was the fact that the same general readiness and beginning reading program was being used with children from secure homes of educated parents and those suffering from the acute cultural and linguistic deprivation characteristic of certain areas of every large city. These and other factors too numerous to mention seemed to demand careful appraisal and the best thinking of which we were capable.

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[1] The term "layers of structure" is borrowed from Chapter XII of Charles C. Fries's *The Structure of English* (New York: Harcourt, Brace and Company, 1952), in which he rightly places great emphasis on the importance of keeping levels of structure distinct.

[2] Detailed explanations and examples of sector analysis are found in Robert L. Allen, *English Grammars and English Grammar*, a text to be published within a few months by The Macmillan Company.

During this period I had become increasingly interested in the field of structural linguistics and its application to the teaching of the language arts. The articles on "Linguistics and Reading" by Leonard Bloomfield which had originally appeared in 1942 in *Elementary English*, a meeting at NCTE in St. Louis in 1956 at which Dr. Charles Fries first presented his ideas on the subject, some of the work of Henry Lee Smith including his film on "Linguistics and Reading," and other factors began to furnish some guide lines for making practical applications of these theories to classroom practice. Finally, with the publication of Fries' book *Linguistics and Reading* in 1963, there was ample background for launching an experimental program.

It was necessary, however, for Mrs. Mildred Rudolph, supervisor of our experimental classes, and me to construct and write materials for use with the children since no books were available that met our needs. This effort has resulted in the publication of an alphabet book, six readers, and six practice books. Two additional readers are in preparation and will complete the eight book basic series we feel that we need to complete this phase of the language arts program. We were most fortunate, also, to have Dr. and Mrs. Fries join with us in working on these materials based on the principles described in detail in Dr. Fries' book.

The first phase of this reading program, comparable to the pre-reading stage of traditional approaches, is devoted to the direct teaching of the alphabet. We have described this in our foreward to *My Alphabet Book* as follows:

### Why Teach the Alphabet?

This alphabet book is designed to initiate your program of reading instruction in the way which leads most directly into the reading process itself. It provides (with the supplementary activities suggested) the most meaningful kind of prereading or readiness activity for children of all levels of intellectual, physical, and social maturity. It was designed with the following purposes in mind:

1. To teach children the names of the letters of the alphabet
2. To have children acquire mastery and instant recognition of both capital and lower case letters
3. To afford the best kind of material for training in visual discrimination
4. To provide many opportunities for practice in left to right progression
5. To teach the sequence of letters in the alphabet
6. To provide children with a valuable referrent for future use in word recognition and word attack
7. To lay the groundwork for an understanding of the alphabetic principle upon which our written language is based

For a detailed discussion of the alphabet and its relationship to reading, I would refer you to Chapter Five of Dr. Fries' book. In addition, to obtain a point of view concerning the teaching of the alphabet different from that expressed by a linguist, I recommend the chapter in the Sixtieth Yearbook of the NSSE written by Durrell and Nicholson entitled "Pre-school and Kindergarten Experience."

The program itself in the beginning or transfer stage and the materials constructed to implement it follow closely the following principles of Dr. Fries:

1. Learning to read must begin with and build upon the language control already achieved by the pupils.
2. Materials prepared for teaching children to read, therefore, should contain only the language already controlled by the pupils.
3. Contrast and especially minimum contrast is basic in this teaching method since all the significant matters of language are matters of contrast.
4. Introduction of words in the readers follows the three major spelling patterns of English as outlined by Fries, namely,

the consonant-vowel-consonant combinations, the words ending in "silent *e*," words containing vowel digraphs.

5. Reading is developed from the beginning as a means of acquiring meanings, not only the meanings of separate words, but these meaningful words always in sentences, and these sentences in sequences of small units with the cumulative meanings of connected discourse.
6. Pictures are eliminated from the readers themselves and are used in the practice books to check pupils' comprehension and correctness of reading.

Encouraged by the success of our experimental classes of the last two years, the program will be expanded gradually in the future. In addition to the work in first and second grade groups, this linguistic approach is being tried in classes of retarded educable children, partially sighted children, emotionally disturbed pupils, upper grade classes of retarded readers, and Reading Clinic cases representing all levels of elementary and secondary schools.

In summary, let me list some of the pre-requisites and requisites for embarking upon a program such as this:

1. A desire to do a better and more effective job in the teaching of beginning reading
2. A supervisor who believes in the program, is enthusiastic, and has a good background in classroom work at the primary level
3. Materials in ample supply since many children once they really understand the system use up material very rapidly
4. A principal who is interested and will lend active support to the program and encouragement to the teacher
5. A teacher who is willing to look forward eagerly to the new work and not back regretfully at the techniques she is leaving behind

And so we end with the teacher, the one who really determines the success or failure of all educational programs. Administrators, supervisors, and teachers, themselves, would probably agree with the ideas expressed by Hullfish and Smith in their book *Reflected Thinking: the Method of Education* when they say, "The point of attack in bringing about a significant reconstruction of education—in the classroom, at the level where mind meets mind—is the reconstruction of the teacher. It is this reconstruction that is essential for the creation of a reflective learning atmophere. What finally counts in any reorganization of the curriculum, in short, is the reconstruction of the teacher."

## B. JUNIOR HIGH SCHOOL

### 1. The Nebraska Curriculum: Literature, Linguistics, and Composition

ELDONNA L. EVERTTS

ANYONE involved in building a sound curriculum should possess a basic understanding of how children and adolescents grow and develop as well as being knowledgeable on theories of learning and instruction and the role of motivation, interest, and reinforcement. Curriculum planners are aware that students learn quickly those understandings and generalizations which they discover for themselves. A curriculum which encourages a teacher to use skillful questions and an inductive method of instruction is more effective than one which condones telling or lecturing and which often results in mere repetition, memorization, and testing.

When planning a curriculum we must provide situations which will encourage students at all grade levels to think. Success in life demands that the individual have the ability to think and make judgments; consequently, it is essential that we teach students to think in the classroom. Knowledge which is already possessed and understood by the student and applied to new situations enables the student to acquire a greater concept of the structure involved. Today it has become more important than ever before that we help our students to analyze a situation, identify the basic issue, consider possible solutions by drawing upon previous experience and knowledge, and then reaching a logical conclusion which can be supported by research, knowledge, or intuitive thinking. Such a basis for instruction encourages a thoughtful, creative approach to any problem at hand—the understanding and appreciation of a literature selection, the recognition of a linguistic principle, or the manner in which to organize, compose, and present a piece of expository writing. We want students to be able to apply what is learned to new situations, to be able to re-arrange material, and to understand the basic structure of a content area. The Nebraska English curriculum has attempted to define such a program.

### The Center

The Nebraska curriculum was begun in 1961. A questionnaire sent to English teachers throughout the state by the Nebraska Council of Teachers of English revealed that the English curriculum at that time lacked unity or a sequential plan of instruction. Consequently, during that summer a group of teachers, scholars, and consultants prepared a description of an English program which they hoped would be helpful to Nebraska teachers. During the summers of 1962 and 1963 a series of teaching units for grades 1-12 were written by teachers who attended the institutes supported by the Woods Charitable Fund of Lincoln. In addition to writing classroom materials, the teachers attended classes in literature, linguistics, and composition. During the 1964 institute teachers concentrated on composition, rhetoric, and logic and revised and extended the teaching units.

It was during 1962 that the Nebraska Curriculum Development Center was organized under Project English and as such it is supported by the University of Nebraska and federal funds administered under the auspices of the United States Office of Education. The material which has been produced in the Center is being used experimentally in four pilot-school districts as well as by individual teachers and districts throughout the state.

### Literature

The English curriculum as conceived in Nebraska has been based upon two convictions. First, that students should have a broad acquaintance with the literature of our western culture by being introduced to the best which has been thought and said in our tradition. Second, that students can be helped to acquire skill in using and recognizing good writing by studying the forms and patterns most worthy of imitation in oral and written communication. To accomplish these broad objectives the curriculum has been centered around a study of literature with a study of the nature of language as described by structural linguists and a carefully designed program in composition as three essential components.

The literature program in the elementary school includes a study of folk-lore, fairy-tales, myths, heroic legends, adventure, biography, and stories of the past and present which are read to the pupils. Each selection at the elementary level has its own contribution for the child at the time it is read to him. It is meant to be enjoyed and appreciated when it is introduced as well as to provide a reservoir of literature for future comparisons. At the later levels the students read comedy, satire, tragedy, and selections which deal with the nature of man and his place in the universe. One of the benefits of this program, which teachers using the units have reported, is the interest it has stimulated in books and reading.

### Linguistics

Passages from good literature are selected and the conventions of language are discussed. Students are helped to bring their intuitive sense of grammar to a conscious understanding of what is involved. This implies that the teachers must know the nature and characteristics of language behavior if they are to discuss meaningfully and accurately the features of language with students.

In the elementary school the pupils should be able to use and manipulate their language in a number of ways and to understand the manner in which it operates but not necessarily to know all the terminology involved. Teachers who are teaching an understanding of language from the structural linguistic point of view report that students in the upper levels are learning grammar more quickly, easily, and completely than they did with traditional grammar. Our experience in Nebraska indicates that teachers cannot afford to be unfamiliar with linguistics.

Language change, dialect, usage, and the historical development of our language is especially fascinating to and within the comprehension ability of upper elementary and junior high school students. Lessons in dialect and the historical development of our language re-inforce each other. The pupils are helped to understand language by looking directly at the language and noting its conventions rather than by studying rules prescribing how language should function. The students learn that a dictionary records the manner in which the language is being used and that its function is not to prescribe how the language should be used.

### Composition

After the student has had an ample opportunity to hear or read selections of quality literature, he is given the opportunity to write his own stories, compositions, and experiment with language. As the teacher reads the compositions, she notes the competencies which the pupils have displayed and the topics which need further exploration upon either an individual or group basis.

Recently funds have become available from the Louis W. and Maud Hill Family Foundation of Minnesota and the University of Nebraska to direct a longitudinal study of the logic and syntax of children's compositions in grades two to six. The linguistic scheme of analysis of the syntax which will be used in this study will permit a comparison to be made between the written and oral language patterns of elementary school children. The findings presented in the Indiana University study[1] by Ruth Strickland will be the basis for the description of oral language while the current study being conducted at Nebraska will concentrate upon the kinds of sentences children write, the "kinds of thoughts" expressed in writing, and what effect intensive training in literature and linguistics in the elementary school has upon the sentences children write and upon the logic in their written discourses.

Curriculum building is a never ceasing activity. It may be expected that changes in literature, language, and composition curricula will be made as the pioneer study at Nebraska and other research unfold the nature and structure of these areas, the effect of different curricula, and the result of various instructional methods upon student achievement.

## 2. Language Studies and the Teaching of Literature

GEORGE HILLOCKS, JR.

THE TEACHING of reading at the secondary school level is usually either ignored or relegated to the realm of remedial or corrective reading classes taught by a special reading teacher. Ordinarily the secondary school English teacher is grossly insulted if he has to teach reading to his students. He regards reading as a prerequisite of the study of literature—a prerequisite with which he needn't be concerned. When a special problem in meaning arises such as the interpretation of a symbol, he explains the meaning to his students, apparently not caring whether his students will be able to cope with a similar problem if they should ever encounter it. Perhaps the fault is not all with the teacher; some of the blame may lie with the rather inadequate analysis of skills in reading literature. The skills involved in elementary school reading seem to be clearly defined, but the inference skill seems to be a catchall involving many complex problems. Although it may not be possible to define various kinds of inference skills, it is possible to define various literary structures about and in which inferences must be made if understanding is to be complete.

Two language studies of ostensibly disparate character provide a great deal of insight into the problems of meaning that arise in the higher literary structures. These are the theories of Kenneth L. Pike, a linguist at the University of Michigan, and Northrop Frye, a literary scholar and critic at the University of Toronto.

### Language Theory

Pike states that for purposes of observation language units may be viewed as *particles*, *waves*, or *points* in a linguistic field. Take for example the following utterance: "Robinson Crusoe originated

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[1] Ruth G. Strickland. *The Language of Elementary School Children: Its Relationship to the Language of Reading Textbooks and the Quality of Reading of Selected Children.* Bloomington, Indiana: Bulletin of the School of Education, Indiana University, July, 1962.

the forty hour week, because he got his work done by Friday." The sounds of this utterance may be segmented for observation. The first sound of Crusoe /k/ may be isolated, as may all the other meaningful sounds of the utterance. In reality, however, it is difficult to say where one sound ends and another begins—where /k/ ends and where /r/ begins; for in actual utterances, sounds are blended together into waves and may be examined in relation to the sounds with which they occur—in waves. Sounds may also be viewed as points in a field of all the possible sounds of the language, so that they can be viewed in contrast with other sounds. For instance /k/ contrasts with its voiced equivalent /g/ as well as with other sounds in its field. At a higher level the separate words of the utterance, *Robinson* and *Crusoe*, can be viewed as particles in a wave of words. A wave of words can be viewed as a particle in a larger syntactic structure (such as a phrase or clause) which occurs in still larger syntactic or grammatical structures. The pun as a unit can be analyzed into two semantic particles: *Robinson Crusoe is responsible for the forty hour week*, and *because he got his work done by Friday*. The first particle sets up certain expectations concerned with working conditions, labor unions, and a question as to what Robinson Crusoe has to do with it. The second particle resolves the expectations in an incongruous manner. The pun as a whole may be regarded as a particle in the wave of a larger discourse as it is in this one, or it may be viewed against a field of puns.

### Literary Theory

It is at the level of the grammatical hierarchy that Northrop Frye's theories of literature become relevant, for he is concerned with the images, incidents, characters, symbols, styles, and themes which make up literary structures—with the particles which blend together into a wave and with the fields in which the specific particles and waves occur. Frye is concerned with the distribution of alternative incidents, images, and themes which occur within a given slot in the waves which make up a literary field. Comedy, for instance, is such a field. In this field Frye is concerned with the nature of the hero; the patterns of imagery, symbols, and themes; the plot structure; and the manner of presentation, all of which, in a single comic work, can be viewed as interlocking waves.

### Applications to Teaching the Reading of Literature

What does all this have to do with reading? Let us return momentarily to Pike's phonological hierarchy, concerned with meaningful particles of sound and the ways in which they are grouped together. A reading teacher might teach the sequence of graphemes and sounds in the word *pat*, but unless he teaches these sounds and their graphemes in other environments it is extremely unlikely that the beginning student will recognize any but the word *pat*. It is unlikely that the student would read *tap* and certain that he would not read *pit*, *pet*, *put*, or *pot*. Yet on the other hand if this vowel series were studied in a series of contexts and in contrast to one another, and if the graphemes *t* and *p* were studied in various environments, it would be very likely that a student would recognize and read these sounds in the environments of other words.

The same is certainly true at the level of Pike's grammatical hierarchy. Most secondary English teachers teach literary work either in isolation or only in relation to an historical period. They traditionally teach *Macbeth* as the sole example of Elizabethan drama in twelfth grade survey courses. The various fields against which the play might profitably be examined—the general field of Elizabethan drama, the history play, and tragedy—are usually neglected. As a result, the student is very unlikely to be much better equipped for reading another tragedy than he was before he read the play.

Attention to particle, wave, and field ought to produce students who *can* read literature rather than those who *have* read literature, and perhaps we, as teachers, will begin to feel that at least some of our work is done by Friday.

# C. SENIOR HIGH SCHOOL

## 1. Language, Linguistics, and the Teaching of Reading

STANLEY B. KEGLER

I SHOULD like to spell out two reasons which I see for the blocks in communication between the linguists on the one hand and reading specialists on the other.

The reading specialists make certain assumptions about language which may or may not be true; the linguists make certain assumptions about the process of learning to read which may or may not be true, and which often are viewed with a jaundiced eye by classroom teachers.

A second reason for blocks in understanding may arise, not only from misunderstanding itself, but from a differing point of view of what language is. As Gleason[1] has suggested, "language has so many interrelationships with various aspects of human life that it can be studied from numerous points of view . . . " all of which are valid. Viewed narrowly, it can deal with the structure of speech or the analysis of the system of language from the point of view of its own structure. In this view it is really linguistics, I should suppose.

But language can be viewed from the viewpoint of the psychologist, the logician or philosopher, the social scientist, the acoustic physicist, and the anthropologist. These latter tend to view language, not as a structure from its own inherent system, but rather as a manifestation of human behavior.

My colleague in the Minnesota Project English Curriculum Development Center, Rodger Leigh Kemp, has pointed out in another context that the second block to understanding may well derive from the fact that most linguists view language as a system or a structure and most reading teachers view language and experience with language, which is what reading is, as a form of behavior. Reading teachers and linguists will not understand each other better, it seems to me, until each understands the point of view, together with the assumption underlying that point of view, from which the other group operates.

Recent statements about language study are not characterized by clarity of expression or purpose. To many, the study of language is restricted to the study of "linguistics"—the structure of the language. To some, the study of language encompasses only the history of our language. Some few—Gleason[2] is a good example—see the study of language as the binding force, the focus, of the entire curriculum in English language study including reading. The study of language, hopefully, will encompass far more than linguistic analysis. Whether it will approach the point which Gleason suggests is difficult to predict. Let me suggest what language study means to me, and then let me indicate why I think this kind of study is important and relevant to the teaching of reading. Language study, to me, includes the study of the origin of language; the ways in which language affects culture and culture affects language; the structure of the language; the history of language; the problems of meaning, reference and proof; major forms within which language operates, which would include a study of linguistic phenomena in the various *genres* of literature and in the various *genres* of persuasive and expository discourse.

Presently, such study is almost nonexistent at any school level. Yet, orderly instruction in the study of the nature and function of the English language has been identified as a problem of prime educational significance by various commissions, organizations, agencies, and committees. The significance of such instruction derives from the importance of the study of language as it reveals the nature of man and illuminates form and conduct of all social situations. One need only examine the nature of our political and social structure to see the importance of an educated and linguistically sophisticated citizenry which must constantly make decisions affecting individual and group actions. I am suggesting that we work to understand the language we speak, not only for academic reasons, but for very real, practical reasons. I am not suggesting here that we study language only to understand its grammar—although good arguments could be made for that assertion—but rather that we study language to better understand ourselves. Whatever the job of the school, however the school views its task in society, whichever its institutional goals—depending on the jargon you prefer—the task as I see it is to help students understand man and his world. What better way to understand man than to study the most human of his creations—language?

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[1] H. A. Gleason, Jr. *An Introduction to Descriptive Linguistics*. New York: Holt (1961), p. 2.

[2] H. A. Gleason, Jr. "What Is English?" *College Composition and Communication*, 124 (October, 1962).

I am quite certain that each of you has his own definition of the reading process and what it involves. To me it involves *perception* and *reaction*, with all the evaluative processes implied by the term "reaction." What, then, can the study of language do to improve or modify current reading instruction? What relevance does knowledge of our language, its nature and its functions, have for learning to read effectively?

What is suggested by this analysis? The answer the question is to answer it. The student who masters the "800 structure points"—or at least those which make a critical difference in the meaning of what he reads—is likely to be the effective reader.

To replace the disordered and fragmented instruction about language, instruction in the skills of speaking, reading, writing, and listening should proceed *within the context of instruction about language.* If this were effected, language instruction could well provide the core around which the communication skills were taught. Each classroom experience in reading, writing, speaking, and listening would be viewed as another experience with language—another significant opportunity for instruction about language. Let me indicate only a few of the titles of units we have developed at the Minnesota Project English Curriculum Development Center and you will see the implication for secondary school reading instruction more clearly:

Changes in the Meanings of Words
Grammar of Sentences
Syntax: Clues to Meaning
Our System of Writing—Spelling
Language Varieties
The Dictionary
The Nature of Meaning
How We Learned Our Language
The Language of Literature

These units, which represent only a fraction of those under experimentation in classrooms at the moment, run the gamut from grades seven to twelve.

The work of the psycho-linguist, to which I referred earlier, also has its implications for the teaching of reading. The use of the semantic differential scale developed by Osgood, for example, has led to some interesting discoveries. It has been shown rather dramatically that when we teach the word "dog," for example, that the word will have variant meanings for students, depending on previous instruction and experience. This is not startling news to any of you, of course, but what you may not know is that the variety of response is at least partially predictable when other factors are known. In addition, the work of the psychologists in the use of word-pairs has suggested that certain words can trigger, not the meanings of those words, but rather a closely allied word. The implications of this kind of information for what happens when a reader reacts to printed symbols are fascinating.

I would like to suggest one other development in language study in the secondary schools which is of importance to instruction in reading. This development is the renewed attention being given to the study of rhetorical principles at the secondary school level. It is quite apparent that this interest may supply the vehicle by which literature, writing, and language may be welded into an effective language program.

Who would have dared to predict, during the height of World War II, the kind of world we would be living in in 1964? Those who dared were subject to scorn. And who, having lived through the dramatic technological changes of those last two decades would be willing to say what this civilization will be like 25 years hence? Yet, in 25 years, today's senior high school students will be masters of their own houses, and in many cases, our houses, too. How can we prepare them for their job, which Margaret Mead says is to "teach young people to solve unknown problems in unknown ways"?

I submit that the problems will change, that the solutions are unknown. I also submit that the problems will be enmeshed in the language we speak and the verbal symbols we manipulate when we think. What better way to help young people "solve unknown problems in unknown ways" than to aid them in understanding how to manipulate those verbal symbols? This is what language study can do.

## 2. Recognizing Grammatical Clues

SUMNER IVES

THE TYPES of grammatical clues which follow are all instances of interaction between grammatical forms and lexical meanings. They are in the transition zone between grammatical and lexical meaning.

The first is a relationship between the meaning of a word and the kind of grammatical form which follows it. For instance, compare the meanings of *got* in "he got to eat later," "he got moving eventually," and "he got hurt in the accident." The forms of *get* have different meanings when followed by an infinitive, a present participle, and a past participle. Questions of whether such phrases appear in formal writing or not are irrelevant. The fact that they occur often and can be explained by rules consistent with English verb formation means that they are part of the English linguistic system. Similar distinctions are made with other verbs, as in "he has to leave now" and "he is to leave later."

Another type is the relationship between the meaning of a word and the kind of word it is grammatically related to. Compare the meanings of *pretty* in "she is a pretty girl" and in "they went pretty far." In the first, *pretty* modifies a noun, and in the second it modifies an adverb. In this instance, the difference in meaning is greater than a mere shift in class.

A third type is a matter of grammatical relationship and the lexical sense of some other word in the sentence. Compare the sentence "growing corn is green," in which *corn* is the simple subject, modified by the participle *growing*, with the sentence "growing corn is easy," in which the simple subject is the gerund *growing*, with *corn* as its object. When one sees such sentences as these, he makes the essential subject-verb connection by using, as subject, the word which is semantically the most probable. In the present instance, corn is much more likely to be green than to be easy. This is not exactly the same problem as that in the sentence "flying airplanes can be dangerous," for the sentences I gave are not ambiguous, although the prevailing kind of structural grammar has no way to distinguish them on a purely formal basis.

The preceding type of grammatical clue might be called that of suspension and resolution—a set of probabilities is held in the mind until a decision is indicated by something occurring later in the sentence. A different kind of this general type is used to distinguish such a sentence as "playing cards is expensive, if you play for money and lose often," from one like "playing cards are expensive, at least some kinds are." In speech, intonation helps, but the visual signal is the fact that the verb in one sentence is singular and in the other plural.

A more subtle kind of suspension and resolution is illustrated in the contrast between "I see the doctor now" and "I see the doctor tomorrow." The first sentence makes a statement about a present and purely visual act; the second sentence refers to an intention which involves more than a purely visual act. When reading these two sentences, a final decision as to the meaning of *see* is suspended until the adverb appears—or, if it has been tentatively made earlier, it is affirmed or revised by the lexical class of the adverb.

Before ending, I shall mention two kinds of probability which are not, strictly speaking, linguistic. One is the probability of performance, a matter of selecting a meaning on a basis of general experience. Take the sentence "the paper is ready to sign." Obviously, general experience denies the likelihood that the paper will do the signing, so we accept a passive meaning, although the verb is not passive in form. The other kind of probability comes from the situation. The best instance I can think of to illustrate situational probability is taken from Martin Joos, the sentence "take the big one upstairs." The interpretation of this sentence rests on the current position of the big one. In practice both kinds of probability frequently come to the aid of the linguistic clues.

I shall point out some of the grammatical clues in a very familiar poem, "Dover Beach," by Matthew Arnold. The first five lines are very simple—three sentences with the subject-verb-adjective pattern and two with the subject-verb pattern, although each contains modifiers. Thus:

*The sea is calm tonight.*
*The tide is full, the moon lies fair*
*Upon the straits; on the French coast the light*
*Gleams and is gone; the cliffs of England stand,*
*Glimmering and vast, out in the tranquil bay.*

Nothing very complicated so far. The next line is:

*Come to the window, sweet is the night air.*

This is an ordinary imperative followed by an inversion pattern—adjective-verb-subject. The next line begins with "only," followed by a comma. The punctuation indicates that *only* does not here mean what it would mean in such sequences as "only five" and "only by eating." Give it the meaning of "however" or "but" as I repeat the preceding line and follow it with the next two.

*Come to the window, sweet is the night air!*
*Only, from the long line of spray*
*Where the sea meets the moon-blanched land,*

Here we have a long adverbial phrase which includes an adjective clause, modifying *spray*. Arnold here complicates the syntax by inserting, as an interjection, "Listen!" As I repeat a pair of lines and continue, mentally omit this interjection, and you will note the subject and verb of the sentence.

*Only, from the long line of spray*
*Where the sea meets the moon-blanched land,*
*Listen! you hear the grating roar*

The final word in this line, *roar*, is the object of *hear* and is modified by a prepositional phrase and by a fairly long adjectival clause. Thus:

*you hear the grating roar*
*Of pebbles which the waves draw back, and fling,*
*At their return, up the high strand,*

Read this section without the clause. I interpret the verbs in the lines following this clause as unmarked infinitives, all with *roar* as their subject.

*you hear the grating roar*
*Of pebbles . . .*
*Begin, and cease, and then again begin,*
*With tremulous cadence slow, and bring*
*The eternal note of sadness in.*

To condense, "you hear something do something." The only remaining problem is the position of *slow*, after the word it modifies. When *slow* follows a verb, it is adverbial, but here it follows a noun and is therefore adjectival, although not in the usual position.

Now read this first portion of the poem and recall my interpretations of its syntax.

*The sea is calm tonight.*
*The tide is full, the moon lies fair*
*Upon the straits; on the French coast the light*
*Gleams and is gone; the cliffs of England stand,*
*Glimmering and vast, out in the tranquil bay.*
*Come to the window, sweet is the night air!*
*Only, from the long line of spray*
*Where the sea meets the moon-blanched land,*
*Listen! you hear the grating roar*
*Of pebbles which the waves draw back, and fling,*
*At their return, up the high strand,*
*Begin, and cease, and then again begin,*
*With tremulous cadence slow, and bring*
*The eternal note of sadness in.*

As you know, the entire poem is an expression of nostalgia. Arnold is regretting the passing away of a simple world of faith. Those who work in or with the language may regret the passing of the apparently simple world of five vowels, long and short, and eight parts of speech. The teaching of reading has a long tradition, and a great deal of practical value has been learned. I am not suggesting that all this be abandoned, but some new resources are now available. At home, I sleep on a bed that was made before 1800, but the mattress was made in 1961, and I use an electric blanket on cold nights.

# PART IV RESEARCH AND RELATED AREAS

## A. RESEARCH DESIGN

### 1. Behavioral Research in Reading: What Does It Offer?

Alton L. Raygor

“The less a science has advanced the more its terminology tends to rest on an uncritical assumption of mutual understanding.” This quotation from the philosopher Quine (*4*) seems to me to summarize the most important problem in the advancement of the science of reading. The purpose of this paper is to try to make as clear as possible what I think Quine meant by that statement and what it implies for the current state of research in reading.

Before I go into the subject of how reading can profit from behavioral research I shall attempt a brief, oversimplified history of behaviorism in learning psychology and a brief comparison with the psychology of reading.

In 1919, when William James died, we were approaching the end of an era in psychology which had been characterized by common sense behavior descriptions in terms of will and purposive explanations. Data, if any, came out of the personal experiences of the psychologist, uncontaminated by statistical treatment. In the reading field we were also dealing with concepts which had been "armchaired" together.

Beginning in about 1910 we began a different kind of period, concerned with mass testing, statistical approaches to problem solutions, and an appreciation of individual differences in ability, achievement, and growth rates. In reading research we were developing also mass testing programs, approaching problems in an increasingly statistical manner, and discovering individual differences.

During the 1920's and the early 1930's this parallel between learning psychology and reading continued. However, because of the influence of behaviorism initiated by J. B. Watson in 1913, learning psychology began developing a body of research techniques and an experimental philosophy which was not matched in the psychology of reading. Experimental procedures were applied with many variations in experimental conditions, and the immediate effect on the organism was observed. In many cases, studies were done on single organisms and replicated on a few more. Another strong trend in learning psychology is the emphasis on a stimulus-response analysis of behavior. The notion of reinforcement became the dominant mode of "explanation," and out of the research tied to the concept of reinforcement came great changes in the ability of the psychologist to produce behavior. However, in reading research we are generally where we were in the 1930's, except for a few refinements in statistical techniques and testing devices. We are still testing large populations, using statistical rather than experimental controls, and doing treatment studies using large samples, long treatments, and measurement before and after many changes in the experimental conditions.

I have a card file on college and adult reading research with about three hundred studies of the effects of college reading programs. In each study students were tested at the beginning; treatment was applied; and testing was done at the end. These studies offer very little help to us in determining what it was which brought about the changes in behavior we measured. I deplore the loss of the thousands of hours of experimenter time which could have been given to the assessment of a specific change in experimental conditions if the notion of behavioral research had been more influential.

I think that in many cases we forget that the goal of scientific inquiry in the psychology of reading is the prediction and control of behavior. The first step in such efforts is the development of a language between scientists. The learning psychologist has found such a language by restricting his terms to those which are descriptive of observable events. I argue that the lack of development of the science of reading is due to the inadequacies of our language. Because the behavior we study is largely covert, we use terms that are best described as metaphysical.

If we look at the typical list of important abilities under the heading of reading, we find such statements as "ability to read in thought units," "ability to understand the main idea," "ability to retain ideas," "ability to acquire word meanings." Unfortunately, the key terms in these lists are not defined conveniently in behavioral terms. Precisely what is the organism doing when it is engaged in "reading in thought units" or "acquiring word meanings" or "understanding main ideas" or "retaining ideas"?

It seems clear that one of the primary sources of confusion in reading is the tendency to substitute names of things for events. The whole notion of thought units and word meanings and main ideas, as things rather than events, is a good example of explanatory fictions which provide us ways of talking about the behavior without really describing it. Our use of such terms obscures the fact that reading behavior is an observable class of behavior —a set of responses to stimuli which may be seen to occur under certain conditions. A science of reading behavior will be an attempt to develop a systematic body of knowledge which will enable us to predict and control this type of verbal event.

If we take behaviorism seriously, we have to stop and consider what kinds of data we have available to us. We have several methods of studying the behavior while remaining with observables. One is to examine the organism using techniques borrowed from the physiological laboratory. Some of this research is exemplified by the excellent studies by Miles Tinker and others on the behavior of the eyes.

Another type of research uses electromyographic records of the subvocal speech mechanisms. Unfortunately, this technique will not yet enable us to determine whether the patterns of sub-vocal speech of one organism are similar to those of another reading the same material.

A third method of gathering objective data is the technique of verbal association. The behavioristic approach to reading posits a chain of associated, sub-vocal responses, occasioned by the printed stimuli. Readers can be trained to produce these responses overtly, so they can be recorded and analyzed. This methodology has not been utilized yet for reading research.

A fourth method of inquiry is one in which statistical controls are replaced by experimental controls on a single organism with direct observation of results. This is the kind of research which has produced almost unbelievable changes in behavior over short periods.

I can give you some further idea of behavioral research by referring to some of the few studies in reading. The men who reported them are not identified with reading, although they are studying the reading process in a worthwhile way. I mention them because they exemplify the work which results from a hard-headed, behavior-oriented attitude about reading.

Arthur Staatz (*6*), James Evans (*1*), Wells Hively (*2*), and O. K. Moore (*3*) have had marked success teaching preschool children to read by utilizing operant conditioning of responses to both auditory and non-auditory verbal stimuli. These attempts are extremely valuable to us for two reasons: they produce reading behavior at an earlier age so that when we get the reader later he will have had a wider variety and a longer history of reading responses. The second and more important reason is that they point to the type of experimental study which is probably going to give the most information about the reading process.

I have recently had an experience which brings home the power of certain changes in reinforcement schedules. We had students reading some material on a device which produced material in a window whenever the reader pulled a lever. We introduced a change of schedule so that material appeared in the window on a fixed ratio or on a variable ratio schedule. We found that after a period of continued reading material appearance, a fixed ratio schedule (with material appearing every fifth level pull) produced a higher rate of response, and instead of two or three lever pulls at the end of the material, we had subjects pull the lever 45 times with nothing appearing in the window of the device. We transferred them to a variable ratio schedule which has produced marked resistance to extinction in other organisms. We used a variable ratio schedule in which the average number of lever pulls per material appearance was 12. We had subjects at the end of the last appearance of reading material pulling the lever as much as 150 times without anything appearing in the window. Apparently they gave up only when their right arm was exhausted from all the lever pulling. I will not go into this research further except to indicate that the implications of this for "motivation" research are obvious.

Another example of operant conditioning of reading behavior of college students is a current project in which subjects are allowed to read material presented on a device in which the stimuli are made to appear at a rate under control of the reader. The time necessary to read each segment is recorded on a cumulative response recorder. Whenever the reader reads a segment more rapidly than he read the preceding one, a pale green light shows through the page he is reading. The student is instructed to maximize the frequency with which the material is illuminated by the green light. This is, of course, the notion of changing behavior by immediately indicating to the subject that his response was the desired one. So far the data are very encouraging. All of our subjects show marked increases in rate of response. Some have doubled or tripled their reading rate. We are just beginning an attempt to develop the type of discriminations and behaviors we call reading rate flexibility measured by differential rates on varying materials.

## Speculations About Reading Behavior

In discussions of possible behavioral research in reading, I have come to the conclusion that the classical ditinction between operant and respondent behavior has a great deal to offer in the analysis of the behaviors we call reading. What we have traditionally called "lower order" reading skills seem to be heavily weighted with respondent behavior, in which the reader is duplicating the response behavior of the writer. The so-called "higher-order" reading skills seem to me to involve operant behavior, in which the reader manifests his own behavior repertoire in an attempt to do more than simply get the literal meaning of the author's message.

One of the most important tasks facing the scientist who wishes to advance our understanding of the reading process is an attempt to develop a behavioral analysis of both the respondent and the operant aspects of reading behavior. A very impressive beginning is to be found in an article by Arthur and Carolyn Staats (5) in which they compare the development of speech and reading behavior in the young child. A similar analysis of reading behavior by young adults would be very useful, but has not yet been produced.

## What Does Behavioral Research Offer?

To get back to our problem and summarize, behavioral research is the application of experimental controls to the study of behavior, utilization of *only* those terms which refer to observable events, manipulation of the experimental situation so that behavior is under constant control and the consequent changes are immediately and constantly visible.

Now, what does behavioral research offer? First of all, it offers *communication*. When I refer to critical reading, you may not know what I mean. When I refer to the presentation of a specific stimulus and the observation of a particular response, you know exactly what I mean, and we can communicate further. We are not using terminology which, as Quine put it, "tends to rest on an uncritical assumption of mutual understanding."

Second, behavioral research offers control of behavior. Whether we like it or not we are in the business of controlling and producing human behavior. One of the things that has held back the development of science in the whole educational world is the unwillingness on the part of educators to accept the obvious truth that learning is behavior change, and that he who would produce behavior change is controlling the behavior of another human being. The reason that behavioral research is so important is that it allows us to avoid producing the behavior we do not want.

The third and possibly most important thing that behavioral research offers is the possibility of much *more rapid development* of the science with which we are concerned. It helps us avoid the kind of pseudo-problems that kept philosophers and early psychologists busy before the behavioristic revolution. Possibly this can be best stated in the words of a psychologist who rejects the whole notion of behaviorism—Carl Rogers. He argues for his own particular brand of psychology by saying that it enables us to "see old facts in new relationships."

I think its greatest advantage is that it will enable us to take the findings of the psychological research laboratory into the classroom, and may very well cut down the "technological lag" that has been so characteristic of American education.

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## 2. New Frontiers in Research: Applications of the Computer to Investigations in Reading

J. WILLIAM ASHER

THE WORD "Computers" has been the magic word invoked over a problem in almost all areas where perplexing questions exist. Facing complete annihilation by nuclear warfare? Try computers to bring world peace or at least defend yourself. Is your company going bankrupt? Perhaps a computer will help. Does your university or school system need more status? Buy a computer.

The non-computer-using population tends to give a "mystique" to computers. Therefore, when it is indicated in the title of this paper that computers will be applied to investigations in reading, those of you not familiar with computers may tend to think that many of the problems in reading will soon be resolved. Therefore, as a preface to this paper, it again needs to be made abundantly clear that, while computers are extremely powerful in their analytic procedures, they can never produce results that are one bit better than the data which go into them. This should be almost self evident, but unfortunately it often isn't.

I have brought the above points to your attention because in examining "new frontiers in research" it is sometimes helpful to review some of the older territory. There are many more qualified than I to do this, so I will briefly quote from a report given at this convention last year. Jeanne Chall in a preliminary report on her City College of the University of New York-Carnegie Study (*1*) stated that the primary purpose of her study was a critical analysis of the experimental literature on beginning reading methods which would help future experimenters design more critical studies. She indicates that the preliminary analysis showed "There were practically no studies that would meet strict experimental criteria. The different methods compared were so poorly defined and described . . . that it will be difficult to interpret the findings with any degree of certainty. Except for a few early studies, most of them were narrowly conceived, with no attempt to anchor their hypotheses in a theory of learning or of the reading process. A discouraging note is that the more recent studies, although they use more elaborate statistical tools, appear to be even more narrowly conceived than those reported in the 1930's."

She found further that excellent results were often claimed for a method, yet when the experimenters were asked for objective evidence, there was often none. She states, "In general, I found emotion where reason should prevail." She further states, "The parochialism and emotional involvement with a particular approach raises some fundamental questions regarding the possibility of 'objective' reporting by those directly involved in the outcomes of experimentation."

If designing an experiment to meet "strict experimental criteria" were extraordinarily difficult, this might ease our conscience somewhat, but it is not. An ordinary elementary school teacher can learn the basic elements of research design sufficient for her own purposes within a month on a part time basis. (I refer you to the first fifty pages of Chapter V in the *Handbook on Research in Teaching* (*2*) as the best single source.)

I have spent this time bringing to your attention this criticism and documenting it for two reasons, one past and the other future. In the past I have had some experience with proposals for research in reading at a national level. The statements I have just quoted tend to strongly confirm the feelings and suspicions I had at that time, namely, there was a good percentage of people in the field of reading who wanted financial support for their "research" projects who had only a vague notion of elementary principles used in the collection of evidence for making decisions to differentiate between an approximation to reality and their fantasy life.

For the future I am concerned that computers—as a new frontier in reading research—if used to make these past typical reading research procedures more complex and larger, will merely make weak research more massive poor research, and bad research a horrible conglomeration of misinterpretations. It must be strongly emphasized that the mere use of a computer to analyze data will not somehow magically produce high quality results in the field of reading.

The first use of computers in doing traditional jobs has almost invariably been to do jobs in the same old ways, but to do them faster or cheaper. Later computers were used to do new jobs which had not been considered prior to the advent of computers.

So, too, it has been in educational research. Many educational researchers including those in reading research know of computers, and that they can do statistical analyses with great speed and reasonable costs. Most researchers, however, probably are not as aware of the major advances in computers, new analytical programs available, and cost reduction in computing in the past few years which will have a decided impact upon the *total* design of educational research in its broadest sense.

The *first* of these new considerations is the *number* and *variety* of data of interest to the research which could be collected knowing that all of it could be analyzed and used. Now the only major consideration restricting the investigators is the cost of collecting the data. Often in a school system, systematic data will be available that will be collected concurrently with the course of the research. The possibility of interesting results from these data, along with the primary results of the research, is worth the almost negligible costs of adding them to the analyses of the primary data. If the results of the analyses prove upon inspection to be of no interest, they can be discarded.

Traditionally, data from sub-tests have been combined in various ways and only the total scores analyzed. At one time in the history of educational and psychological research a new variable was created by dividing two variables or subtracting one variable from another. This probably was done to halve the analyses (though creating other errors). Now with computers the concern should be to create enough interesting variables to adequately reflect the multiplicity of criteria necessary to evaluate all the many types of learning in an elementary, secondary, or collegiate school system in terms of the many facets of various educational philosophies.

This multiplicity of variables means that more frequent samples of behavior over time can be taken, and there is no need to combine or average them for convenience of analysis. Further, a number of independent variables can be related to a number of criteria variables each in turn, instead of attempting to predict a conglomerate single criterion.

In addition to the *mass* of analytical results that can be obtained, a second strategic factor in the use of the computer in educational research, is the *speed* with which raw data can be processed and the results analyzed. This is not now primarily the time, one—five—ten minutes, that it takes the computer to do the analyses—although this is a factor—but the time from the completion of the collection of the data to the placing of the analytical results in the hands of the investigator, the teachers, and administrators in the schools. While this speed has benefits to the researcher in terms of expediting generally the progress of the investigation toward a final report, there is also a *strategic* value of importance to him which should be taken into account when the educational research is planned. In educational research in a school system there is always a major problem of concern. Despite all previous laboratory and pilot research, when a fairly new type educational operation in reading, or any other subject, is put into effect in an on-going school system, there will almost inevitably be problems evolving about which the educational administrators and researchers may not be immediately aware. These need to be remedied before educational damage is done to students. No administrator can ethically let the students in his school be exposed to educational methods which, if allowed to continue over an extended period of time, might retard their progress.

With numbers of people involved in research — researchers, administrators, teachers, and children there may be communication problems in the research. The strategic use of the computer here is that a full examination and analysis of the educational products can be made with little effort at the end of a number of relatively short intervals—say monthly or every six weeks. Complete analyses of the results at that time can be made. If there are problems of communication or gross inadequacies, these can be quickly corrected. The educational administrators' qualms about the ethics of allowing relatively untried procedures to be put into practice can be somewhat relieved.

Finally, there is the simple matter of *convenience* to be taken into account in the strategy of using computers in educational research. There is the convenience of a large number of "canned" analytical programs available which require very little knowledge of computers to use. For instance, almost every college or university with a computer—no matter how small—has or can get already written computer programs for such standard statistical analyses as X's, O's, "t" tests, correlations, multiple correlations, Chi Square, Analysis of Variance, frequency distributions, and item analyses. A researcher needs to know very little about computers or programing of computers as such. Usually a standard data format for the IBM cards is indicated and a few decisions made as to what particular variation of the analysis will be used. Here again is a danger. It used to be that to some extent the sheer intricacies of formal statistical manipulation acted as a selective device. People who could wend their way through a statistics book, could probably also wend their way through some principles of experimental design. (This was not necessarily true however.) Now not even this ability is necessary. Let readers of research beware.

There often is one standard data format which can be used with many programs, and the standard format will handle almost any type of quantitative data developed in reading and educational research generally. The most common format at the University of Pittsburgh is three or four digit data with four letter and/or digit subject identification. In many programs up to 130 variables may be handled simultaneously. These specifications certainly are not major limitations for most research. Some universities will of course have such valuable programs as step multiple correlation, missing data correlation, and factor analysis also readily available. Researchers soon learn how valuable these are to your own work. With more multiple machine computing equipment being installed in universities, and more programs being written in computer languages which are transferable among machines, there will be even more programs generally available for use by researchers. Cooley and Lohnes' book, *Multivariate Procedures for the Behavioral Sciences* (Wiley, 1962), alone gives many programs, written in the FORTRAN language, for seven major multivariate analytical methods. While these were written under the assumption that an IBM 7090 is available, they have since been modified for the much more available and cheaper IBM 1620. All of this means convenience, no programing and "debugging" expenses and time lost for the researcher.

One precaution should be mentioned. Because computers can digest huge quantities of data, researchers tend to collect more data. Data handling can become a problem in and of itself. Care must be taken to handle the data expeditiously. The first time data are copied, they should be assembled in such a form that cards can be keypunched directly from the original data sheets. Researchers cannot afford to record, copy, recopy, punch, and repunch data. The costs of this data handling will soon be more than the cost of the computer time for the analyses.

Expanded data collection, speed, and convenience then are the three strategic concepts to consider when computers are to be used in educational research work.

Essentially, however, we were doing the old type jobs in newer, faster, and more complex ways. We need to consider *new* jobs in schools that are now possible with computers. Here I might talk about my possible theories. It is probably more honest to call them products of an active fantasy life. For instance, it should be possible to put all of the students' records on computer tape to begin with and save the school systems a great deal of clerical work. With these data in readily available form a number of continuing assessments of the value of various procedures and methods could be made. When more formal research is done, the relevant data could be extracted and transferred to a research tape. Clerical work would be minimized. Perhaps the school systems themselves would start to look at the data products of their efforts more frequently when the clerical and formal analytical efforts are minimized.

In addition, the entry of computers into school systems gives us a clue to the relative status of various functions in a system. After all a computer costs a good deal of money and thus requires administrators to make decisions as to the most important aspects of the system where these computers will be applied. Their first use today is almost inevitably in accounting, payroll, and supply inventory. Another use now being made is in pupil scheduling. Computers have moved down from the superintendent's office to the second line school administrator, the school principal. It is interesting to observe here, however, that the major concern is to get the bodies into a class and get the classes balanced. (Whether a student's abilities are best used in *that* particular class is not yet of enough importance to use valuable computer time!) Pupil accounting is also of importance. Here they don't mean how much a student learns, but was the body present so that they can collect their state aid for the day. Most of the above are fairly well developed computer functions in some school systems.

## Application of Computers to Reading Research

In the preceding section I have indicated the strategic uses of computers for educational research generally and for research in reading as a part of the general field of educational research. Now, however, I want to present to you some specific ideas for research in reading which are perhaps new to the field or at least have been so time consuming and expensive that they haven't been done very often. I will not give you an extensive list, nor can I say that all of these are reasonably feasible right now by just anyone who decides to get into this type of research. However, none of these ideas are patented and while I have worked on pieces of some of them, research in reading is not my primary field of interest. Thus you can use any of these ideas that you wish, or can substitute other research ideas that are better. It is the research and the improvement of our schools that is the important thing rather than the specific ideas.

The first use is one that is reasonably possible with computer programs already in existence. It is the analysis of words by frequency counts and location within a text. Immediately a follow-up of the Thorndike word list work or one of its several successors comes to mind. Interestingly, this process came to my attention as I was leaning over the shoulder of a computer operator one day while he explained a procedure used in the analysis of statute law. He explained that the very common words were of little value in searching the law for information retrieval purposes so they threw them away. He never, of course, had heard of the Thorndike word lists. Here they had the frequency count on almost as many words as was in the original Thorndike sources and didn't realize that they had any more value than that of an intermediate step in another process.

We used their computer procedures to analyze some text materials ourselves. We put in the total text of several of the major publishers of first grade readers and were able to obtain the frequency count of all the words for each publisher. With a little more sophistication it would be possible to obtain difference and similarity counts among readers for the guidance of reading teachers. If a teacher has a good class and they finish their basic texts rapidly, it would be possible to indicate to her other texts with the similar word lists or moderately different word lists, or quite different word lists. This study would not have to be confined to the first grade, but could be done at any level. Nor would this research on words have to be confined to printed words. It would be quite possible to record spoken language, replay the tapes, keypunch a transcript of the conversations directly onto IBM cards, and then onto magnetic computer tape for processing. Such projects as the spoken vocabulary of kindergarten children, or mentally retarded twelve-year-olds are the types of things that have scientific interest that now can be done with greater facility.

One piece of work which we have already done at Pitt is to take vocabulary counts of printed text broken into units and determined the relative coincidence in each section of the most frequent words (*3*). Our text was the Pennsylvania School Code—a rather good sized volume. We took as our unit each separate statute, 1341 in all. We counted, in a 113 (words) by 1341 (statutes) matrix, the number of times that the word—say *children,* appeared in the same statute as other words—say *teacher, retirement, superintendent,* etc. Then it was possible to actually compute a correlation coefficient to indicate the correlationship between any two words found over the sample of statutes. This resulting 113 by 113 correlation matrix was then factor analyzed. This is a massive job requiring, even now, on the order of ten to twenty hours of high-speed computer time. This was unthinkable prior to the advent of computers. We were able to determine that a knowledge of the factors—really the clusters of concepts represented by the factors from the matrix of words—was of value in guiding a searching strategy of information retrieval. Of what use this general procedure has for the field of reading, I'm not sure. However, I would suspect that you, too, will find it intriguing. For instance, can the underlying themes of a text book or a child's conversation be determined somewhat more objectively with this technique? I don't know, but at least the procedure has now been developed and found feasible.

We have been able to move from doing old things in new ways to doing new things in ways undreamed of a few short years ago.

Another indication of perhaps another new frontier in reading research which is being started by E. Summers (*4*), and follows from the work in information retrieval, is that which we have done using legal text. This idea, by the way, I consider to be his scientific property, but I'm not concerned about trespassing since he has acquired the basic information file by dint of many years of effort, and this latter work is not one which one would want to duplicate. I use the example to indicate the procedure not the topic.

In any scientific field communication and integration of results is a necessity if the separate pieces of research are to make sense and be built into theory of significance. In the field of reading research has been done for many years and resumés are available, as well as indices such as the *Psychological Abstracts* and the *Education Index*. It is well within the realm of possibility, really very close to the action stage now, that modern computer based searching of these abstracts of research in the reading field will be possible. And this will not merely be on a word by word index. Searching can be done best on combinations and series of words. For instance, are you interested in oral reading at the first grade level by slow learners? It will be possible—and not too far in the future—to pick the words representing these three concepts and select and print the abstracts of all the research from a very, very large collection of abstracts in the reading field.

There are also studies which fall more under the heading of educational engineering, rather than research, which computers make feasible. These studies are of the variety of "let's evaluate our current educational practices and see if they can be improved." One of the most common of these types that my students run, which falls into the field of reading, is the evaluation—in a given school, for a given population — of reading readiness tests versus other tests as predictors of reading achievement. There is evidence pro and con for the general use of these tests, but it is no longer necessary to be forced to accept general evidence. With computers what could be easier than correlating the readiness test scores, the teacher evaluation of achievement (of several types), and year end objective measures of achievement on several measures? All of the predictors can be used in multiple regression equations, for each criterion in turn, to determine what the relationship is for a given setting. I can tell you that there will be some surprises in store for some of you. The cost of a ten variable problem for several hundred children can be less than fifty dollars which is considerably cheaper than the cost of administering even one superfluous test. This type study done over a period of years should give us considerable insight into the interrelationships of the variables operating in a given school's first grade reading program.

Another engineering type study which could be done is to keep on punched cards (or magnetic tape) records of the standard tests given in the elementary schools. If a remedial reading specialist wishes to know who of all the children in the school are reading "below expectation," it would be a simple matter to compute a regression equation which yields the best estimate of the expected reading level. Then the appropriate variables can be selected by the computer from the punched card files, fed into the regression equation, the result for each child compared against his actual reading criteria scores, the difference computed, and if it is greater than expected by chance, the name of the child printed in an appropriate listing. (The chance value of course should be the standard error of estimate of the multiple prediction.)

This sounds very nice doesn't it? However, I've just led you into a trap partially of your own making. I hear and often read of the "underachievers" in reading. Yet to define "underachievement" in reading, you must define at what level a child should be *expected* to read. This *expected* level should probably be defined by a regression equation of those variables which add significantly to the prediction of reading achievement. Then by definition there can be no deviation from the predicted reading level that cannot be interpreted as a chance deviation. Therefore, you must consider very carefully whether there really is a meaningful definition of underachievement in reading.

This is not to say that there are not children who need remedial help in reading, but is to say that the usual definition of underachievement in reading leaves much to be desired.

Here, then, I have given you a new frontier in reading research using computers but have pointed out that they cannot be used with the older inadequate procedures in reading research without magnifying the errors of interpretation of the research, as well as the size of the populations and number of variables involved.

## Summary

I have given several strategies which I have found useful to consider when one thinks about educational research in this day of the computer. I have also made some of my private fantasy life somewhat more public by telling you some of the types of research and educational engineering we are doing at Pitt, using computers as a new tool to do new types of research in new ways. Some of this I hope will prove to be valuable to you. As I have indicated, I hold no patents on the ideas or procedures. I hope you will consider several of the ideas, improve upon them with your far better knowledge of the field of reading, and move ahead your profession and the science and art of teaching reading.

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## 3. Needed Improvement in Research Design in Reading

DONALD L. CLELAND

IT WOULD NOT be difficult to justify a conclusion that research on reading instruction comprises more space in magazines, journals, books, encyclopedias, etc., than in any other area of education. The late Dr. William S. Gray has estimated that approximately 4,000 scientific studies of the sociology, psychology, and teaching of reading are available. While it is true that most of these studies dealt with reading at the elementary level, according to Summers[1] approximately 1,000 research studies have been completed which dealt with reading at the secondary level. It would be a safe guess to say that the total number of studies, if all could be located, would nearly double the 4,000 mentioned. According to Gray,[2] the number of research studies increased each decade and reached a peak in the period 1931-1940 with a total of 1,071 studies. During the next decade, and possibly because of the second World War, the number of studies reported amounted to 915. Apparently, a resurgence occurred *post bellum* as over 700 studies were reported for the period 1951-1957. As testimony to the fact that the number of research studies in the area of reading is increasing year by year, Robinson[3] cites 185 studies completed during the period of July 1, 1962 to June 30, 1963. A little simple arithmetic, therefore, would indicate that approximately 2,000 studies might be completed during the decade 1961-1970.

Several reasons or forces may account for this upswing.

1. The increased emphasis upon reading and particularly at the secondary level. It would be safe to say that slowly, but definitely, teachers and administrators are realizing the tremendous role the skill of reading plays in all study activities.

2. The encouragement of research in reading by the United States Office of Education. Money to support research in reading has been made available by congressional action. Increasingly, year by year, more money has been made available. This fact alone has resulted in an

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[1] Edward G. Summers, *An Annotated Bibliography of Selected Research Related to Teaching Reading in the Secondary School: 1900-1960* (Pittsburgh: School of Education, University of Pittsburgh, 1963), pp. 183.

[2] William S. Gray, "Summary of Reading Investigations," *Encyclopedia of Educational Research*, ed. Chester W. Harris (New York: The Macmillan Company, 1960), p. 1087.

[3] Helen M. Robinson, "Summary of Investigations Relating to Reading, July 1, 1962 - June 30, 1963," *The Reading Teacher*, Vol. 17 (February 1964), pp. 326-391.

increased number of proposals submitted for funds to support cooperative research projects. Mention should be made also of other funding agencies such as the Carnegie Foundation.

3. The efforts of the National Council on Research in English. Specialists in the field of reading are applauding the dynamic leadership of those responsible for the latest effort of NCRE to get support from the U. S. Office of Education for cooperative research. To me this is the most exciting adventure in research that it has been my pleasure to witness. As a member of a cooperative team, I have witnessed the combined efforts of the leaders in reading, psychology, and experimental design directed not only towards improvement in research design, but directing the weight and force of their prestige in a manner that will ensure research proposals strong in both *internal* and *external* validity. The fruit of this effort should be more palatable and more generalizable than much of the race-horse type of research that has been so prominent in the past.

At this point in our discussion, let us turn our attention to research on research. Several such studies have been completed at the University of Pittsburgh—studies which critically examined research in spelling,[4] phonics,[5] and reading comprehension.[6] The conclusions drawn as a result of the critical appraisal of the research studies listed are revealing and further attest to the need for improvment in research design or a better control of certain variables.

In 1954, Pavlak[7] examined 234 references to spelling. After carefully examining them, he decided to study critically 121 of these studies to ascertain if they met research criteria which were formulated by Monroe and Engelhart,[8] namely:

1. Definition and restriction of the experimental factor.
2. Control of pupil factor.
3. Control of important non-experiment factors.
4. Accuracy and validity of measures of differences in achievement.
5. Justification of generalization.

After applying the criteria of scientific accuracy, forty-nine studies or 40.5 per cent were rejected.

Of the 72 studies accepted, eighteen of the nineteen doctoral studies, thirty-six of the sixty-two masters' theses, and eighteen of the forty journal and monograph articles, were accepted. After critically studying these seventy-two studies, Pavlak[9] arrived at the following conclusion:

> After carefully studying and comparing the findings of the various scientifically accurate research studies, it was found that the studies did not agree as to the best general method of teaching spelling. According to the accepted investigations, neither the test-study method nor the study-test method was superior in the teaching of spelling. An analysis of the scientific studies showed that there was a trend toward conducting research on the value of the individual method of teaching spelling.

A similar evaluation of research studies in phonics was conducted by Morrone[10] in 1958. Of the 198 references secured and examined, 101 were selected for critical study, using again Monroe's and Englehart's criteria. Of the 101 studies examined critically, thirty-three were accepted as having satisfied the aforementioned criteria. Of the thirty-three studies accepted, thirteen of the eighteen doctoral dissertations, eight of the twenty-four masters' theses, and twelve of the journals and monographs, were accepted.

One of the conclusions drawn from a critical examination of the studies is very disconcerting. The following substantiates this point of view:

> After a careful analysis of the scientific research on phonics in reading, it was found that disagreement existed as to the approach and amount of phonic instruction teachers should utilize. Some of the investigations disclosed that phonics become meaningful and functional when they are used as an integral part of the reading instruction. Other studies revealed that phonics should be taught systematically each day in a specific period distinctly apart from

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[4] Stephen Pavlak, *A Critical Analysis of Scientific Research in Spelling,* Unpublished Doctoral Dissertation (Pittsburgh: University of Pittsburgh, School of Education, 1956).

[5] Victor E. Morrone, *A Critical Analysis of Scientific Research in Phonics,* Unpublished Doctoral Dissertation (Pittsburgh: School of Education, University of Pittsburgh, 1958).

[6] Arthur W. Schoeller, *A Critical Survey of the Scientific Studies of Reading Comprehension,* Unpublished Doctoral Dissertation (Pittsburgh: School of Education, University of Pittsburgh, 1950).

[7] Pavlak, *op. cit.*

[8] Walter S. Monroe and Max Engelhart, "A Critical Summary of Research Relating to the Teaching of Arithmetic," *Bulletin No. 58* (Urbana, Illinois: University of Illinois Press, 1931).

[9] *Ibid.*, p. 212.

[10] Morrone, *op. cit.*

> the basic reading lessons. . . . The trend indicated that the process of teaching phonics should be one of analysis rather than one of synthesis. Phonics should be taught as a process involving whole words rather than isolated word elements.

It is interesting to note that the same conclusion was drawn in 1921 by Theisen:[11]

> The question of phonics or no phonics is perhaps of less importance than (the question) of just what, how much, and from whom. Present practice is exceedingly wasteful. . . . The phonic content taught should have a direct bearing upon the reading in hand.

A careful study and evaluation of scientific studies in reading comprehension further attests to the need for improvement in research design in reading. Schoeller[12] critically analyzed 211 studies in comprehension, which encompassed the period from 1884 to 1948. Of these studies, fifty-three were rejected as not meeting the criteria set forth by Monroe and Englehart.[13]

Of the 211 studies critically examined, four of the forty-four doctoral dissertations, thirty-six of the seventy-eight masters' theses and eighteen of the eighty-nine journals and monographs were rejected. One of Schoeller's conclusions is worthy of note:

> Research in this field is still sporadic and the types of problems attacked are not chosen in a systematic way. Many of the problems that have been investigated have been concerned with only a few grade levels, such as which skills begin to develop at certain age levels. Also, some of the problems, such as factors in comprehension, have been only partly investigated.

At this point, it would be revealing to recapitulate the findings as a result of the critical evaluation of studies in spelling, phonics, and reading comprehension. Of the 433 scientific studies, 170 were rejected and 263 were accepted. *The bare unvarnished fact is that approximately 60 per cent were accepted as having met the criteria selected.* Seventy-one of the eighty-one doctoral dissertations, eighty-six of the 164 masters' theses and 140 of the 188 studies reported in journals, etc., were accepted. It is interesting to note that the above falls into the following rank order:

1. Doctoral Dissertations
2. Journals and Monographs
3. Masters Theses

It is shocking to note that 47.5 per cent of the masters' theses examined and accepted for study were rejected.

It is true that these three studies were completed during the 1950's. I am confident, also, that during the last decade more sophistication has been brought to research studies in reading. Notwithstanding, however, few would have the audacity to suggest that we have reached the point beyond which no improvement could be made.

At this point in our discussion, let us turn our attention to a writer who enjoys stature in the area of reading.

In a recent article which appeared in the *Phi Delta Kappan,* McDonald[14] gives his reactions to an evaluation of research studies he reviewed during the last ten years.

The author lists sources of error in research studies. The list is quite thought provoking and supports the theme of this paper. An abbreviated form of these are as follows:

1. Failure to correct for regression to the mean.

2. Treating reading grade scores as empirically obtained indications of month-by-month progress. In reality, reading grade scores are extrapolated from one grade level to another.

3. Interpretation of test scores on the assumption that the tests used provide reliable and valid measures of the most important aspects of reading.

4. Spurious scores obtained from the use of a single test over wide educational (or performance) levels.

5. Use, for checking reading comprehension, of test questions which can be answered by most children from their background knowledge (i.e., without even reading the selection).

6. Errors in interpretation because of use of inappropriate norms, failure to allow for interform differences in equiv-

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[11] W. W. Theisen, "Factors Affecting Results in Primary Reading," *Twentieth Yearbook, Part II,* National Society for the Study of Education (Chicago: University of Chicago Press, 1921), pp. 1-24.

[12] Schoeller, *op. cit.*

[13] Monroe and Engelhart, *op. cit.*

[14] Arthur S. McDonald, "Some Pitfalls in Evaluating Progress in Reading Instruction," *Phi Delta Kappan,* XLV (April 1964), pp. 336-338.

alence, etc.

7. Failure to select a really comparable control group.

Previously in this article I mentioned that what was needed in research in reading was not necessarily improvement in research design, per se, but an elimination or better control through randomization of certain variables so that the *information estimate* obtained can be contributed to the independent variable. Otherwise, the dependent or consequent variable may be explained by rival or alternate hypothesis. Except in the isolated science laboratory, it is extremely doubtful if research in the child's environment or in a simulated atmosphere can be cleanly controlled.

The task which we face, therefore, if we cannot control certain non-experimental factors, is to randomize them so that any confounding effect they might have on the information estimate is evident in both control and experimental groups.

Cognizance on the part of the experimenter of these confounding variables which may give rise to rival or alternate hypothesis will enable him to design experiments which will be strong in both *internal* and *external* validity, thus obtaining an information estimate that will be highly generalizable. Let us therefore look at variables that, if not controlled or randomized, may confound experimental results. As I explore these, you will instantly recognize that I have drawn heavily upon the literature, especially the *Handbook of Research on Teaching*[15] and a paper presented by Dr. Guba[16] to the faculty of New York University.

Certain conditions must exist if we are to secure an unbiased *information estimate*, not necessarily to prove a given hypothesis, but to build confidence in a conclusion each time new evidence has been uncovered. In fact Guba says,[17] "experimentation thus is a systematic procedure for exposing some hypothesis to disconfirmation." He goes on to say that the assertion that all swans are white can be disconfirmed at once if we can point to a black swan. Yet we build confidence in the truth of the assertion every time we inspect a swan and find it white. By the same token we build confidence in the superiority of Method A over Method B every time we see research which gives evidence that A is superior to B.

I have asserted that we need an unbiased *information estimate* if it can be generalizable. At this point, we might ask, what experimental and non-experimental conditions might give us a biased *information estimate?* A review of the literature would reveal many, among which might be the following:

1. History—the effects of events, situations, or experiences that occur simultaneously with the experiment. For instance, parents may attempt to aid their children in reading, using an approach that would be foreign to the antecedent variable.

2. Maturation—that is, effects of processes that may be associated with normal growth or maturation.

3. Testing—the effect of one testing upon another subsequent testing because of practice or memory effects, etc. For instance, this effect may be seen in certain speed reading courses in which pretesting is followed by reading exercises, the format of which is very much similar to both the pretest and the postest. In effect, the students are "trained" by the pretest and reading exercisees to do better on the postest, thus giving rise to a rival hypothesis.

4. Instrumentation — the effect wrought by changes in instrumentation. This factor was referred to as *instrument decay* by Campbell and Stanley, a descriptive phrase which seems to explain this concept very neatly. Changes in the calibration of a measuring instrument or changes in observers or scorers used may bring changes to the obtained measurements.

5. Statistical regression—this extraneous variable is operative especially when groups have been selected on the basis of extreme scores. Students in a remedial reading group whose pretest scores are low almost inevitably will show gain since it is a statistical truism that any extreme

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[15] T. T. Campbell and J. C. Stanley, "Experimental and Quasi-Experimental Designs for Research on Teaching," Chapter V in Gage, N. L. (ed.), *Handbook of Research on Teaching* (Chicago: Rand McNally, 1963).

[16] Egon G. Guba, "Common Sense About Experimental Design in Educational Research" (Paper read at a Faculty Symposium, School of Education, New York University, February 25, 1963).

[17] *Ibid.*, pp. 2-3.

group on retest will manifest a regression toward the population mean. By the same token, similar experiments on gifted children will also show a regression to the mean, which in this instance may be lower than the pretest mean. This regression towards the mean is a ubiquitous phenomenon. Any principal who observes that his highest IQ students do not necessarily have the highest achievement scores, and that his lowest IQ students may not have the lowest achievement scores, may be guilty of this *regression fallacy* if he concludes that the brighter students are under-achieving and his dullest students are over-achieving, and consequently, announces to the faculty that they are overstimulating the slowest and understimulating the brightest.

6. Differential selection—the effect of using groups that have not been selected randomly, and thus, the groups may not be comparable according to some criterion or criteria. If two methods of teaching reading are being compared and one of the groups, either the experimental or control, has a significantly higher IQ than the other, any differences obtained cannot be as ascribed, *a priori*, to the independent variable. Or likewise, if one group were selected from a high income level where probably more intellectual stimulation is provided by the parents and the other group were selected from a low income group where, probably, little intellectual stimulation is provided, the end results may be attributed to a rival hypothesis.

7. Subject mortality—the effect of differential loss from experimental groups resulting in non-comparable groups. Mortality—families of children moving to another school district, cases on which only partial data are available, and dropouts from the experimental group because of lack of willingness to continue—is very troublesome to handle and is commonly, as one writer put it, swept under the rug.

These seven sources of rival or alternative hypotheses constitute major threats to the internal validity of an experiment. Thus, the *information estimate* gleaned from the research may be adulterated, and if so, does not permit generalization. How can researchers then rid experiments of these confounding variables? This can be done in two ways—by control and by randomization. If it were possible to control completely all confounding variables, the *information estimate* would be certain. This halcyon state is, however, impossible to achieve in practice. The other choice, therefore, is to randomize. In such a situation, the effect of these variables is not removed but is forced into a pattern which is predictable from statistical theory. The estimate of the size of the effect produced by these randomized variables is called an *error estimate*.[18]

It would not be amiss at this time to mention, very briefly, three true experimental designs which so neatly control the biasing effects of the seven rival hypotheses previously described. Campbell and Stanley[19] have described them as:

1. The Pretest-Postest Control Group Design. In this research design equivalency of groups is achieved through randomization. Both groups, the experimental and control, are given both pretests and postests but only the experimental group receives treatment.

2. The Postest Only Control Group Design. In this design we have equivalency of groups achieved through randomization. Both experimental and control groups are tested *posteriori* but in which only the experimental group receives treatment.

3. The Solomon Four-Group Design. This design is really a combination of the Postest Only Control Group Design and the Pretest-Postest Control Group Design. This design calls for four groups—one experimental and three control. All four groups must be selected randomly. The experimental group receives a pretest treatment and postest; control group II receives no pretest, but treatment and postest; and control group III receives postest only.

I hope the theme of this presentation is readily apparent. In spite of the thousands of research studies in reading completed since 1884, many questions remain unanswered. Divination will not give us the answer. Research is committed to the settling of disputes regarding educational practices, as the way of verifying present practice, and as a way of establishing cumulative tradition as pertains to new practices. We must be mindful, however, that while settling disputes, verifying present practices, and establishing cumulative tradition, experimentation can also beget other controversies or disputes.

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[18] *Ibid.*, p. 13.
[19] Campbell and Stanley, *op. cit.*, pp. 183-197.

The three studies cited earlier in this paper point to the need for improvement of research design, or we might say, the need to rid research of confounding variables which give rise to rival or alternate hypotheses. Casting aside approximately 40 per cent of studies as not having met selected criteria is a sad commentary on research. Another potent argument supporting the theme is the support the U. S. Office of Education has given to research. And still another, and perhaps more potent, is the prestige given by the National Conference on Research in English in behalf of research in reading. And finally, the classic effort of the American Educational Research Association offers mute evidence of this need. Only the most naïve would question the continuous need for improvement in research design in reading.

## 4. The Hawthorne Effect and Reading Research

DESMOND L. COOK

THE PURPOSE of this paper is to examine a methodological problem encountered frequently in reading research investigations and which is popularly referred to as the *Hawthorne effect* phenomenon. I shall (a) provide a definition of the phenomenon, (b) discuss the significance of this phenomenon in general research methodology, and (c) present some illustrations of its direct relation to reading research.

An operational definition of the Hawthorne effect has been presented by the author in an earlier paper.[1] It was defined then as " . . . an awareness on the part of the subject of special treatment created by artificial experimental conditions." Subject awareness becomes confounded with the independent variable under study resulting in a facilitative effect on the dependent variable and causing ambiguous results. Under this approach, the phenomenon is truly an *effect* because it is created by certain causative situations. The definition also emphasizes that the phenomenon occurs in the *subject* participating in the experiment as opposed to assigning it to the experimenter or his surrogate as is often done. In the latter case, the investigator's enthusiasm for the experimental variable is said to result in the experimental results' coming out as they do. The tendency for experiments to come out in terms of the experimenter's enthusiasm should best be placed under *experimenter bias* rather than the Hawthorne effect. In any given experimental situation, the degree of subject awareness is probably widespread between subjects.

### Importance of the Hawthorne Effect Phenomenon

Concern over the role of the phenomenon described above as a contaminating variable in social and behavioral science research has developed primarily within the past two or three decades although early experimenters in education (e.g., McCall in 1923) suggested that some such phenomenon might occur and experimenters should be aware of it. The importance of the phenomenon has been brought into focus more and more because of a continuing failure to secure similar results when educational experiments are repeated outside of the setting of their original investigation. Correlated with this failure to observe similar experimental results in new situations is the fact that behavioral scientists began to develop a concern about certain social-psychological interactions between experimenter and subject which heretofore had not been carefully scrutinized. Some of the more current problems of this type being investigated are those of *experimenter bias* by Rosenthal[2] and the work on *demand characteristics* (implicit and explicit cues in experimental situations signaling the subject as to the purpose of the experiment) being done by Orne.[3]

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[1] Desmond L. Cook, "The Hawthorne Effect in Educational Research," *Phi Delta Kappan*, XLIV: 116-122, p. 118.

[2] Robert Rosenthal, "On the Social Psychology of the Psychological Experiment: The Experimenter's Hypothesis as Unintended Determinant of Experimental Results," *American Scientist*, June 1963, Vol. 51, No. 2, pp. 268-283.

The above remarks project an image of the Hawthorne effect phenomenon's being a negative feature of experimentation, and to the extent that it does exist in an experimental situation I believe this condition to be true. There are those, however, who do not look upon the Hawthorne effect as having negative valence but look upon it instead as possessing positive valence. Such a position is represented by recent writings of Uttal,[4] Caplan,[5] and Suchman.[6]

All of these writers feel that the Hawthorne effect has been or can be capitalized upon to motivate students to achieve. Suchman, in his studies on inquiry training at the University of Illinois, feels that his experimental treatments actually utilize the Hawthorne effect to secure greater motivation and thus increase achievement on the part of participating subjects.

## The Hawthorne Effect in Research Designs

Accepting the operational definition of the Hawthorne effect as presented above, let us now turn our attention to its possible role in the design and conduct of research. Some time ago, I hypothesized relationships between possible components of the Hawthorne effect and the stages of experimental investigation.[7] The components of the Hawthorne effect were established by using four frequently encountered definitions or explanations of the phenomenon: namely—"novelty," "attention," "knowledge of results," and "teacher-pupil interaction." The research stages were defined as those activities carried out by an investigator *prior* to conducting the research, those activities carried on *during* the research, and those activities employed as *post* research procedures.

Within this framework, it is possible to relate certain research activities to possible subject awareness. For example, the introduction of new, different, and/or novel materials as part of the research procedure might create feelings of novelty and thereby induce awareness. The use of selected pre-tests as part of the research preliminaries might also cause the subject to realize he is the center of attention and thus induce awareness. It would be possible also during the post experimental interviewing of subjects to signal them in such a way as to cause them to become more aware of experimental participation and hence then respond differently than would be normally expected. These interactions of research conditions and possible components could operate not only in an experimental group but also in a control group, thus accounting for the common finding of *no* differences. Such interactions would, however, be particularly heightened in situations where the experimental group alone received them. Observed differences between experimental and control groups could possibly be accounted for on this basis alone. In situations where both experimental and control groups received identical interactions, the absence of a difference between but resultant greater achievement in both groups might be attributable to an induced awareness on the part of *all* subjects.

This concept of interaction between experimental arrangements and subjects' feelings has been presented to some degree in the current *Handbook of Research on Teaching* in the chapter on experimental design by Campbell and Stanley[8] under the concept of *reactive arrangements.*

From the above possible interaction between components and procedures, some simple and early generalizations about controlling for the phenomenon appear. For example, activities such as pre-testing of subjects should be placed in the context of normal school activities insofar as possible. If testing is done normally in September, any groups participating in the research should be tested during that period and not during the middle of the year when the introduction of special tests create high subject awareness. Also, all experimental and control subjects should receive as nearly as possible identical experimental activities except for the variable under study. For example, unless increased teacher-pupil interaction is a concomitant of an experimental variable then both experimental and control groups should be treated the same with regard to this interaction during the application of treatment stage.

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[3] Martin T. Orne, "On the Social Psychology of the Psychological Experiment: With Particular Reference to Demand Characteristics and Their Implications," *American Psychologist*, 17:776-783, 1962.

[4] W. R. Uttal, "On Conversational Interaction," in J. E. Coulson, *Programmed Learning and Computer Based Instruction*, Proceedings of the Conference on Application Digital Computer to Automated Instruction. New York: John Wiley, 1961, p. 196.

[5] Bernard A. Caplan, "Issues in Educating the Culturally Disadvantaged," *Phi Delta Kappan*, 45:72-76, November 1963, p. 74.

[6] Personal Correspondence with Dr. Suchman.

[7] Desmond L. Cook, "The Relation of Possible Hawthorne Effect Components to Stages of Experimental Investigation," A paper prepared for a joint session of the American Educational Research Association and National Council on Measurements in Education, Chicago, Illinois, February 16, 1963.

[8] D. T. Campbell and J. C. Stanley, "Experimental Designs for Research on Teaching," *Handbook of Research on Teaching*, N. L. Gage, editor. Rand McNally, 1963, pp. 171-246.

I would like to offer the suggestion that a necessary step of any experimentation be a *post-research inquiry*. The purpose of this inquiry would be to determine what research activities, if any, may have created awareness within the subjects. Such inquiry may be rather difficult to conduct at the elementary grade levels but it might be helpful in explaining some research results. We have found in some preliminary work that students at the fourth grade level can and do recognize significant departures from normal routine, and as a consequence they realize their role as participants in a study. One of our research assistants reports that one student could serve as a guide, describing the project going on in the school, he was so well acquainted with the nature of it. While the evidence for this step comes largely from studies using college students as subjects, the use of post-experimental inquiry has turned up many cues other than the experimental variable to which the students were responding. Hence, the technique has proved to be of value in constructing other experimental situations so as to reduce the effectiveness of such cues.

## Relationship to Research on Reading

What specific implications of the Hawthorne effect phenomenon are there for research in reading? I would like to set forth some possible implications by citing some instances that have been called to our attention during our work on the Hawthorne effect wherein there has or has not been some concern with the possible presence of the Hawthorne effect in reading research.

If I were to state that a large percentage of reading research was contaminated by the possible presence of the Hawthorne effect, you would probably react to such a statement by feeling that this was an attack upon your area of interest by a relatively uninformed person. Fortunately, I do not have to make such a statement because McDonald[9] and Chall[10] have highlighted the role of this phenomenon in recent writings.

Let me first cite instances to show the possible operation of the Hawthorne effect on an incidental basis in reading research. In an earlier article,[11] I made note about some work done in a small community in Wisconsin which created national interest[12] because of the controversy which centered around using the McGuffey readers. In reporting on the success of the study, the results were pretty much attributed to using the readers. I questioned at that time, and still do, the extent to which the publicity surrounding the reading program might not have in some way contributed to a greater motivation on the part of teachers, students, and parents and thereby reflecting a type of Hawthorne effect phenomenon. I would also like to call your attention to a recent study[13] in which some effort was made to study the relationship between color blindness, reading readiness and reading achievement. One of two control groups (color blind boys) did better in reading achievement than an experimental group of color blind boys and a control group of non-color blind boys. On this basis, it might be said that color blindness relates positively to reading achievement. Upon investigating the procedures, it was found that the teacher of this group was given information about the color blind status of the students. Apparently, the teacher subsequently used this information to facilitate reading achievement for her group and thus surpass the other groups. It would seem to indicate that giving the teachers information regarding the pupils condition in this case resulted in increased attention to the group of students and thereby created within them a possible Hawthorne effect.

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[9] Arthur S. McDonald. "Some Pitfalls in Evaluating Progress in Reading Instruction," *Phi Delta Kappan*, XLV:336-338, April 1964, p. 338.

[10] Jeanne Chall. *Interim Report on a Study of Methods of Teaching Beginning Reading, The Carnegie Corporation*. October 10, 1962, p. 16.

[11] Cook, *op. cit.*, p. 120.

[12] "Kids with McGuffeys Way Ahead," *Columbus Dispatch*, Columbus, Ohio, June 13, 1962, p. 9A.

[13] David L. Clark. "The Hawthorne Effect and Educational Experimentation," An address delivered to the Research Commission of the American Vocational Association, Kansas City, December 1961.

There have been reported also instances of specific concern with the possible presence of the Hawthorne effect phenomenon in completed reading research. One instance was called recently to my attention.[14] The investigators were questioned, when reporting at a national meeting, about the possible reason for the experimental groups' continually coming out on top. Operating under an assumption that any novelty effect associated with the new method should wear off over time, the project was continued past its original termination date. Follow-up data were obtained from the original experimental-control pupils plus each new third grade group until all third grade pupils in the system had started to read using the experimental method. The results revealed that even over time, and with an increase in the number of subjects, the experimental group maintained their superiority over control subjects and the presence of any Hawthorne effect was discounted.

That the phenomenon is often overlooked in completed reading research can be partially documented by reference to a recent publication from the U. S. Office of Education entitled *Research in Reading for the Middle Grades.*[15] In summarizing the research done during 1955-1960 with regard to practices in the teaching of reading the bulletin points out that in one group of studies concerned with the role of grouping the experimental method always seems to come out on top. It seemed to matter little whether the research sought to evaluate homogeneous grouping, variations of the Joplin plan, reading block programs, pupils pairs, or differentiated instruction. Although in one study the teachers recognized the influence of a Hawthorne effect, none of the investigators took steps to eliminate it or reduce it.[16]

One cannot approach only the Hawthorne effect from the point of view of checking completed research but one can try also to prevent it in projected research. I would call your attention to such an instance in a study[17] on teaching of reading in kindergarten being currently conducted by the Denver public schools. In correspondence with Dr. Oberholtzer,[18] superintendent of schools, he writes as follows:

> We are conscious of the implications of the Hawthorne effect on our study. Because of this we have attempted to provide similar treatment for teachers of pilot and control groups such as in-service meetings, assistance by teachers and special assignments, and curriculum bulletins. Also as can be seen from the research design, certain control groups become experimental and vice versa.

While I do not say that this will remove the Hawthorne effect completely from the research, the consciousness on the part of the investigators that it might operate prior to starting the experiment will lead them to adopt certain control procedures that might otherwise escape them and create problems when it comes to interpreting the research.

Another case of where prior attention has been given to the possible creation of a Hawthorne effect is a project[19] on critical reading recently funded by the U. S. Office of Education and being conducted by The Ohio State University. In this project, both experimental and control groups will receive special treatment. That is, while the experimental teachers are being trained in development of critical reading the control group teachers will have similar training periods but on children's literature materials. An attempt will be made to give equal attention to both experimental and control teachers during the course of the experiment. A further effort at minimizing the uniqueness of experimentation will be handled by informing all the teachers that an experiment is in progress. They in turn will be asked to tell the students.

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[14] Margaret H. Greenman. "A Six-Year Experimental Study of Two Methods of Teaching Reading in the Elementary School," a paper presented at a joint meeting of the International Reading Association and American Educational Research Association, February 17, 1959.

[15] Warren G. Cutts. *Research in Reading for the Middle Grades:* An Annotated Bibliography, Office of Education Bulletin No. 31, 1963, U. S. Department of Health, Education, and Welfare, Washington, D. C.

[16] I. E. Aaron, Francis Goodwin, and Ada Kent. "Fourth Grade Teachers Experiment with Cross Class Grouping for Reading Instruction," *Elementary English*, 36:305-307, May 1959.

[17] "The Effectiveness of Teaching Reading in Kindergarten," Cooperative Research Branch Project No. 1134, Office of Education, U. S. Department of Health, Education, and Welfare.

[18] Personal correspondence with Kenneth E. Oberholtzer, Superintendent, Denver Public Schools, April 23, 1963.

[19] "Critical Reading Ability of Elementary School Children," Cooperative Research Branch Project No. 2612, Office of Education, U. S. Department of Health, Education, and Welfare.

The validity of such techniques as described above in reducing the role of the Hawthorne effect is conjectural. The techniques do represent, however, typical approaches to controlling for the Hawthorne effect. More importantly, the experimenters are conscious of the phenomenon before they conduct the research.

### Conclusion

Regardless of what one's particular beliefs are with regard to methods of reading instruction, one needs to be aware of his role as a researcher seeking the truth with regard to the best procedure for teaching reading. Under this situation, the researcher becomes an impertinent questioner of his own procedures when conducting research and assumes the same role for the research of others. The researcher, therefore, tends to help resolve the conflict presented by Dr. Chall[29] in her summary remarks about a survey on reading methods she conducted.

> The conflict between enthusiasm and involvement (needed by the practitioner) and the cool, dispassionate observation and analysis (needed by the educational experimenter) may probably not be solved if the experimentation is left to those who are concerned primarily with "helping" rather than with knowing. The sincerity and commitment of the teachers and administrators, of whatever view in the controversy, may be functional for their role as educational practitioners, but dysfunctional for their roles as experimenters and understanders of methods.

Just as I am sure that you are sincere about what makes for effective reading instruction, I would ask you also to be equally as sincere in trying to understand the role that a phenomenon like the Hawthorne effect may play in your research. To the extent that such phenomena are better understood and controlled in research then more fruitful will be our efforts in trying to answer the many questions currently being raised about the best method of teaching reading in the schools of today and tomorrow.

## B. INTERNATIONAL ASPECTS OF READING

### 1. Teaching Reading in East Africa

EDWARD FRY

READING INSTRUCTION in East Africa is beset with many problems, not the least of which are those created by the shift in language midway in the child's education. Children start elementary school in their tribal tongues and, after several years, begin a gradual transfer to instruction and literacy in English. The author spent the academic year 1961-1962 at the University of East Africa in Kampala, Uganda as a Fulbright Lecturer, which afforded the opportunity for an informal look at the local educational program and the opportunity to develop and teach a reading improvement course for first year university students and last year secondary students.

#### Education in East Africa

In East Africa reading instruction is begun in the vernacular. In the coastal regions the vernacular is usually Swahili, which is a kind of lingua franca for many tribal areas. However, a majority of the students learn to read in the tongue of their tribe. For example in Uganda there are six tribal tongues. Most of the East African languages have a Bantu base, but many are quite as different as English and German.

In the city schools children enter first grade at the age of approximately six or seven, but in the up-country schools there is a considerably wider range of entrance ages. I visited one mission station first grade which had an age range of 5 to 22.

Theoretically, English instruction is begun in the third grade. However, this instruction is usually of a very poor quality as the teacher herself, or more frequently himself, often only knows a few words of English. At about the end of the third year a small English primer is introduced. The most widely used series of English reading texts is known as "The Oxford English Readers." These books are similar to U. S. reading books only they are much thinner and do not have as gradual a progression of difficulty levels.

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[29] Chall, *op. cit.*, p. 16.

Beginning reading instruction in the vernacular in the up-country schools is usually started with the "alphabet method." The students are taught to write and chant their alphabet. In the more modern schools in the large cities reading methods more closely resemble those found in the United States. Perhaps there is a bit more emphasis on phonics and drill methods. In the upper grades and secondary schools reading comprehension is frequently taught by precis writing. This method is used because it most closely parallels the testing method used in the national school leaving examinations.

In the junior high schools English is theoretically the medium of instruction. The reason for this is that students from different tribal elementary schools may be merged in a single junior high school. Also, these schools are seen as preparation for the senior high school in which English is in fact the medium of instruction. In actual practice junior high schools use a good bit of vernacular as an instructional medium, and hence the junior high school becomes the transition zone from instruction in vernacular to instruction in English.

Education is far from universal. In Uganda about 60 per cent of the population gets four years of education. The figure would be slightly higher in Kenya and slightly lower in Tanganyika. There is a tremendous selection process between elementary and secondary schools. Only four per cent of the age group is in secondary schools. At the university level the figure drops to considerably less than one per cent.

### Reading Course

My assignment at the University of East Africa was to develop a short noncredit reading improvement course for university and senior high school students. The university faculty had recognized for some time that the students were extremely slow in reading and lacked some comprehension skills. After fumbling for about one semester with a group of art students I developed a ten-week course which included reading speed, comprehension, and study skills. The course met for two one-hour periods per week. Each meeting contained a short lecture on the ten topics listed below. The first meeting of each week had a timed reading speed and comprehension drill. The students plotted their reading speed and comprehension on a graph. About 20 minutes of the second period each week was devoted to tachistoscope drill in which a word or phrase was flashed, the students wrote what they saw, and the word was shown again for correction and sometimes discussion. The ten lecture topics were:

1. The Importance of Reading Faster
2. Common Faults and Eye Movements
3. Comprehension
4. Units of Meaning
5. Skimming and Reading Flexibility
6. Improvement Patterns
7. Study Techniques and Factors in Memory
8. Vision
9. Phonics
10. Vocabulary and Continued Reading Progress

### Vision Testing

As part of the course a simple vision screening test was developed which consisted of measuring far point acuity, screening for hyperopia and screening for binocular coordination. Interestingly enough almost a third of the students failed these simple screening tests and were referred to a vision specialist.

### Results of Training

Results of the ten week reading improvement course showed that African university students had doubled their reading speed and made a slight gain in comprehension. This is about the same rate of gain as U. S. college students taking similar courses. The actual words per minute scores went from 188 wpm to 383 wpm while the comprehension moved from 55 per cent to 72 per cent. These word per minute scores are a little slower than one would expect from U. S. university students but one must remember that these students were reading in a second language, and in many instances came from schools of extreme poverty. The final semester that I was at the University of East Africa I prepared a teacher's manual and students' drill book so that the course could be continued under the guidance of an African teacher. These materials have been published by Cambridge University Press and I am happy to say are now used in many countries.

Finally, I would like to encourage my fellow members of the International Reading Association to teach abroad some time in their careers. There are many opportunities now open. College personnel are needed in universities, and secondary schools and elementary administrative personnel can be used in high schools and teacher training institutions. Personnally I found the Fulbright program most satisfactory; further information on it can be obtained by writing the State Department in Washington. There are numerous other opportunities through other government agencies such as the Peace Corps and AID, or teachers may apply directly to the governments of the country in which they are interested. Many African governments welcome applications from United States trained teachers.

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## 2. Reading: A View from West Africa

ANNE MCKILLOP ROBERTSON

FEW EXPERIENCES provide a better perspective on the importance of and the problems in teaching reading than a visit to one of the developing countries. My best opportunity to gain such a perspective came in six months spent in Nigeria.

Literacy divides the country. Vocational and social opportunities are unlimited for the literate, increasingly limited for the illiterate. And the bare literacy that was adequate a generation ago is no longer so. Children, thousands of them, often with very limited experiences with printed words, often in poor health, must be taught to read, often by poorly trained teachers, often with limited materials. And they must be taught to read in English, a language which is not their mother tongue. The problems seem insurmountable; the wonder is that so much is accomplished.

In general, in the Western Region of Nigeria, children begin Primary School (which is free but not compulsory) at about six years of age, receive their first reading instruction in Yoruba by a method that combines "look-say" *sight vocabulary* with phonics, and begin to learn oral English by at least their second year in school. By Primary Four most instruction is in English but Yoruba is continued as a subject. From Primary Five upward *all* instruction is in English.

By the end of the six years of primary school many students are barely literate in both Yoruba and English. They can name words but they have limited comprehension. They do not read for pleasure. For most children this is the end of their formal schooling and it is not enough. Those who go on to secondary school struggle with difficult material for which they have inadequate backgrounds. They work extraordinarily hard, relying on memory rather than understanding, and plod through their studies at a painfully slow rate. Stevens reported the mean reading speed of a group of fifth form boys to be 140 words per minute with only about 20 per cent comprehension. When one remembers that these are highly selected boys the picture is all the more depressing. A survey of the reading skills of University of Ibadan undergraduates showed vocabulary scores similar to comparable American students but very poor comprehension and speed.

It is not hard to understand the students' difficulties. In the first place, English is a second language, and one which many of these students will use only part time. They have to think of the accepted form. It is possible to learn about their reading difficulties from their written work. They make corrections in even a simple paragraph; they use grammatically correct, but unusual, expressions. The material they are asked to read is written by native speakers who use the standard form. This form is familiar to them, but is not quite like an old shoe. To read effectively the language must have become an old shoe. One would expect that these students would be less aware of figures of speech, of contextual clues, of sign posts in sentences. As seen earlier, their errors give clues that this is so.

Another factor making for difficulty is that few of these students have read extensively for pleasure. Only one out of fifty students queried was reading a book for pleasure when they were asked the question. School children have had few opportunities to taste the joys of reading, reading that is easy enough so the reader can go quickly. Suitable materials are not readily available. The content is often strange and unappealing. Reading is a laborious process for many secondary school youngsters; it is easy to see why they are not fluent readers when they reach the university.

Instruction in many primary and even secondary schools has emphasized oral reading, and provided little help or experience in silent reading. Children are told to "read it to yourselves;" they are rarely shown how to do this. Even in secondary school it is not uncommon to hear students in a class reading, in turn, paragraphs from the selection they are considering. This oral work is justified as providing practice in English and as affording the teacher a check on pronunciation. But it is often overdone, and becomes "Reading" to the pupils. Often, too, students are asked to pick out figures of speech, or common or difficult expressions from the novels or other material they are reading silently.

The pressures under which many students work make it difficult for them to concentrate and achieve. Many university students live in fear of failure; so much depends on passing the examination. Many have financial worries; many strive unduly to please, to do the right thing, rather than to think freely about the ideas presented. Undoubtedly there is a great deal of anxiety among students.

Perhaps the startling thing is that, in spite of this paralyzing anxiety, in spite of poor reading instruction, in spite of unsuitable and limited materials, these students do as well as they do. Their intelligence and diligence accomplish much.

Many questions remain to be answered. We know very little about reading skills in a second language, both when the first is rarely used and when it continues to be used. What limits of speed are customarily reached? Is there a certain level of comprehension which must be reached before practice in speed pays off? What comprehension difficulties are prevalent? Does the reader of a second language ever attain the skill of the reader for whom that is a first language? Do these same problems haunt the child whose first language was not Yoruba but a non-standard form of English?

It is relatively easy to make recommendations for West Africa. Perhaps these are equally applicable to our own programs. The key obviously lies in the primary and secondary schools and Teacher Training Colleges. When schools provide easy, attractive, interesting reading material beyond the textbooks; when teachers are helped to enjoy reading so they, in turn, can introduce children to its joys; when reading instruction of the sort described above is provided even in upper classes; when these are accomplished, the reading of secondary school and university students will improve.

In addition reading instruction should be provided at the upper levels. This should not be thought of as a remedial program for students who are somehow deficient, but rather as a program of instruction in necessary skills. The skills to be taught include general study skills, note-taking, essay writing, and use of references as well as specific reading skills.

The emphasis should be on speed of *comprehension*, not on speed alone, on precision of understanding; on fluency with relatively easy material; on the use of grammatical knowledge as a reading aid; on how and when to skim, how and when to read carefully; and on the relation between reading and writing. There should be little attenion to words in isolation. Much of the success of a program depends on the involvement of the students. If reading improvement is something someone does to them, the program will fail;

if it is something *they* do, it will succeed. For this reason, the wisdom and skill of the instructor are of great importance.

Our new perspective on reading gained from a visit to West Africa can provide a fresh look at the relation between speed and comprehension, the relation between reading and language knowledge and the sources of comprehension difficulties.

## 3. A Look at Soviet Education*

ARTHUR S. McDONALD

SINCE SPUTNIK, Americans have shown a growing interest in the Soviet educational system. Often, however, comparisons between the educational systems of the United States and U.S.S.R. have been favorable to the United States. Such erroneous conclusions were the result of inadequate understanding of educational realities in the U.S.S.R. and of Soviet institutions in general.

Because overt terror has been relaxed and greater freedom allowed for entry and exit permits to Soviets and others, many Americans have concluded that the USSR is virtually free. This is an error. The Communist monopoly of power remains a fact with arbitrary and unjust actions by party officials still occurring and freedoms strictly controlled. There are ways of insuring communist control over political, social, and cultural life without necessarily resorting to execution or imprisonment.

An educational system is so inseparably interrelated with its supporting society that it cannot be evaluated without thorough knowledge of the society it serves and reflects.

Generalizations about the Soviet Union, however, are especially difficult to make because of its vast size, cultural heterogeneity, and variety of historical themes. The Soviet Union, containing about 70 nationalities, 170 ethnic groups speaking 80 languages, covers one-sixth of the earth. The continuation of the Russification campaign of the Czarist times also complicates the matter.

Further, the need for important modifications in the organization of the economy will have an impact on all aspects of Soviet life. Competition in arms, space, foreign aid and other areas of the "cold war" has slowed the growth of the Soviet economy. As consumer satisfaction becomes a more important consideration and agricultural failures require outside purchases, Khurshchev seeks radical improvements without explicitly challenging major Communist dogma.

The above factors must be kept in mind in considering Soviet Education.

Major ways of securing information about the Soviet educational system are:

1. Visits to Soviet schools and talks with administrators, teachers, students, parents in the U.S.S.R.

   ALL visits to the Soviet Union must be arranged in advance through the official government agency Intourist. Intourist plans the itinerary, provides guides and interpreters. Foreign observers are shown only what the Soviet government wishes them to see. A majority of Intourist personnel are also affiliated with KGB, the State Security Organization.

2. Talks with Soviet teachers and administrators visiting U. S. schools.

   *All* Soviet visitors have been thoroughly screened for "reliability" and have left "hostages" behind. These persons have one or more KGB personnel with them.

3. Collections of data about the Soviet educational system by careful study of a wide variety of published sources.

   This procedure requires the most careful analysis and interpretation of facts and data in light of a comprehensive understanding of the Soviet governmental, economic, social, security, and propaganda systems.

4. Comparison of textbooks and published curricula.

   This approach may lead to completely misleading conclusions. It makes a difference *how* the courses are taught, how much political bias is incorporated in a course in social science, what the terms mean, the amount of propaganda embodied, etc. This procedure assumes that *claims* and *practices* are similar.

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*Material for this paper rests on the study of many sources, published and unpublished, including conversations with a number of Soviet specialists. All information contained herein is unclassified and comes from open sources. Readers desiring more information about the Soviet Union should consult the works of Crankshaw, Cressey, DeWitt and others.

Recently, a number of visitors to the USSR questioned the realities of the above-mentioned restrictions. While ordinary tourists can carry cameras and talk with Russians, this does *not* mean they are not under general surveillance. Professional journalists, educators, scientists, diplomats, etc. are subject to much more intensive (if discreet) surveillance. All visitors see only what the Soviets do not object to being seen. If persons believe otherwise, then, in the words of Crankshaw "good luck to their innocence."

Soviet education is considered a means to a central aim of the regime. Its purpose is to maximize the economic and political power of the Soviet regime and strengthen its external and internal present position. Soviet educational policy is designed not to find and develop talent but rather to make use of whatever talent becomes obvious.

In the period of greatest American praise for Soviet educational achievements, the Communist party began completely revamping the system because it was unsatisfactorily meeting Soviet needs. These reforms have changed and are changing the Soviet system radically.

Because of the manpower and productivity deficiencies, the Soviet Reform Program (originally planned to be fully operative by 1964) is primarily designed to release more youths for the economy while achieving rapid advances in the technical skills of the labor force to insure a steady rise in agricultural and industrial productivity.

Lowering of the terminal school age to 15 years releases several million youths who would otherwise be in school. Requiring two years' full-time gainful employment before continuing education (after 15 years of age) further cuts the number of full-time students.

Economy of cost was another factor in the Soviet educational changes. Existing facilities were unable to accommodate a greater number of full-time students. Deliberate restriction of higher educational opportunities avoids the necessity of providing more facilities and preserves the prerogative of the current ruling and managerial elite.

Major distinguishing features of Soviet education are:

1. Monopoly control by the Communist Party over all education. Every aspect of Soviet educational policy and practice is firmly controlled by the central organs of the Party utilizing state administrative machinery and Party apparatus.
2. Narrow functionalism of education.
3. Integration of productive work with educational training.
4. Intensive political indoctrination. Social sciences are taught in Soviet schools in conformity with the interests of the current official ideology and ruling Party elite. *No* ideas alien to the official dogma are tolerated. A materialistic outlook and glorification of service to the state are the guiding principles of instruction.
5. Extensive emphasis on scientific-technical subjects at all levels of instruction.
6. Limitation of education at secondary level outside European areas. Children living in the thinly populated areas of the Soviet Union are unable to continue education beyond the primary level because secondary schools are found only in district centers.
7. Secondary schools are mainly apprentice training shops preparing skilled workers and junior technicians.
8. Higher education in USSR is available in fact mainly to children of the Communist elite. Children of workers, peasants and petty employees must go to work after leaving secondary school at 15 .
9. Influence, fraud, and "blat." The new work requirements have caused much use of influence to secure fraudulent work certificates. Those lacking influence but having the wherewithal of bribery or exchange of favors ("blat") have purchased counterfeited work certificates.
10. Greater political preselection. One of the Educational Reform

measures was the placement of party officials on educational selection boards. Admission procedures also specify weighing of trustworthiness and general "worthiness." This criterion serves the applicants who belong to the privileged strata of Soviet society and places greater impediments before the children of the true proletariats.

Thus the organization of the entire system of public education is subordinated to goals of speeded-up and mass-scale training of specialists in all branches of technology and science. The Soviet educational system, always designed for selection and education of the elite, has become more so.

Soviet glorification of science as a creative force to achieve happiness and prosperity for all peoples, together with rigid selection of students, has been important in attracting the best minds to science. Soviet educational technology of this type *is* exportable and *is being exported* on an extensive scale to underdeveloped countries.

The very basis of Soviet education, however, is inimical to the existence and well-being of a free society.

## 4. The Reading Program in Japan

TOSHIKO MISHIMA

THE TITLE of my paper is rather vague and, therefore, I would like to limit my topic to (1) the general trend in the viewpoint about, and the methodology of reading instruction in Japanese schools, and (2) the characteristic features of the Japanese writing system and its teaching on an elementary level.

It was not until the end of the 19th century that the movement toward the unification of written and spoken languages in Japan gained considerable ground. By 1920, some conservative newspapers finally gave in to the new way of writing which more closely resembled the spoken form. Ideas about reading instruction, however, still continued to be classically oriented for some time: that is, reading materials were chosen from the classics. Reading aloud and memorizing sentences often without knowing the meaning occupied a great part of a reading course. This method was used as a means to correct the students' pronunciation without recognizing that pronunciation mistakes by the students were likely to be due to his or her failure to understand the writing system itself. Nevertheless, an increasing number of people began to view the written forms as secondary to speech forms as the literary forms gradually diminished from Japanese writings. Accordingly, the reading instruction has been based on only those materials that students have already learned in their speech activities. More important, however, is the change that took place regarding the role of reading instruction in the school curriculum. Unlike the old practice where "reading" constituted one independent subject along with such others as "composition," "handwriting," and the like, the new theory recognizes "reading" as an integral part of a language education as a whole. This is not to say, of course, that reading instruction follows no distinctive program of its own. It does. Rather, the change is in the recognition of the importance of developing the students' language ability in all the skills, and in the effort to develop the students' ability in a real language situation: i.e., by building a real language situation in a classroom. In reading instruction itself, the method on the introductory level shifted from "letter-character method" and "word method" to "sentence method." This is again the result of a new outlook: i.e., viewing the small linguistic units such as words, phrases, and as functional units in the whole language system. From the elementary level up to the more advanced level, teachers' efforts are directed toward developing the students' ability to understand, interpret, and appreciate the texts spontaneously by themselves. In order to achieve this end, a teacher tries to reduce the explanation of the text to a minimum and he assists the students to find an answer through the use of a dictionary and through their own direct experience with the text.

Going from the general to the more specific, I would like to explain the Japanese writing system very briefly. The

Japanese writing system makes use of three different sets of symbols. One of these consists of Chinese characters which is essentially logographic, and the other two are paralleling syllabaries which are derived from Chinese characters. The coexistence of the two syllabaries is due to the historical development of the Japanese writing system and one of them, called "katakana," has been rapidly replaced by "hiragana." "Katakana" is now used mostly for foreign loan words and telegram sentences. "Hiragana" was primarily used for function words such as particles, auxiliaries, and affixes. In other words, it was used where the logographic Chinese characters cannot be used. However, "hiragana" has been replacing difficult Chinese characters more and more. Each syllabary consists of forty-eight letters, each letter representing one syllable. Japanese syllables generally consist of a single vowel or a consonant plus a vowel. Five letters represent vowels and the rest represent a combination of voiceless consonants and vowels. Voiced consonant and vowel combinations (*k, s, t, h*+) and "p" sound, plus vowels, are indicated by diacritic marks. The letters have one to one correspondence with the sound, and the exceptional cases are very few.

The adoption of Chinese characters has produced a great many problems in our writing system since Chinese and Japanese are very different languages. The Chinese characters have acquired characteristic features of the Japanese language leading only to more complexity. One of these features is a development of different ways of pronunciation attached to each character. In order to avoid confusion, the Chinese characters are taught with one pronunciation for each. Other pronunciations are presented when the students have become familiar with the character and the first pronunciation.

Another characteristic of Japanese-Chinese characters is the loss of tone which Chinese characters originally carried. Because of the small number of consonant-vowel combinations in Japanese as compared to that of Chinese, there evolved a tremendous number of homophonous words. From the learning point of view, this means that the characters must be learned one by one. With only these few examples, the task of learning Chinese characters may appear to be formidable. Nevertheless, the teach of Chinese character-reading has been successful, as well as the teaching of the two syllabaries.

It must also be mentioned here that efforts have been made for nearly ninety years to renovate our writing system so that the burden of learning the writing system can be reduced. The most recent change, in 1946, was limiting the number of Chinese characters to 1,850, for practical use and, in 1951, limiting the number of characters to be taught in primary schools to 881. In addition, the shapes of some characters have been simplified. The use of syllabaries has also been changed in accordance with present-day pronunciation. These changes are the result of a long-time discussion by a special committee whose members represent various professional fields. These opinions are still considered very controversial.

Finally, let me briefly fit these sets of writing symbols into the picture of actual curriculum in schools. "Hiragana" is introduced first, and both "katakana" and Chinese characters are given to students a little later; however, all are introduced on the first grade level. The Japanese schools operate on a three semester system, the first semester starting in April. By the end of the second semester, "hiragana" is almost completely mastered. "Katakana" is mastered within the second year. The Ministry of Education sets a general program for the specific Chinese characters to be taught on each grade level. They are: in the first grade, 46; second grade, 105; third grade, 187; fifth grade, 194; and sixth grade, 144. According to a recent test, the students' actual mastery of Chinese characters by the end of the sixth grade averages 825 out of the 881 characters.

## 5. The i.t.a. Reading Experiment in Britain

JOHN DOWNING and
STANLEY HALLIWELL

### Introduction

THE BRITISH experiment with the Initial Teaching Alphabet (i.t.a.) is now in its third year and in the past year there have been important developments in the use of i.t.a in Britain.

Now in Britain many educators no longer regard i.t.a. as experimental. Quite apart from the 200 schools collaborating with the Reading Research Unit, hundreds of other schools are now adopting i.t.a. as the standard procedure for beginning reading. Although in Britain every principal is free to choose whatever reading program he believes is most effective for his students, already in two large towns one hundred per cent of the schools have adopted i.t.a. The decision of these principals to use i.t.a. for beginning reading has been based to some extent on reports of our research, but largely on first-hand experience of i.t.a gained through visits to the pioneer experimental i.t.a. classes.

This wide adoption of i.t.a. makes even more important the duty of our research unit in London to conduct the scientific evaluation of i.t.a., and I am pleased to report that very substantial funds have been given to us to maintain and expand our research and development of i.t.a.

I have elsewhere provided a full description of i.t.a.[1] and in another recent publication I have discussed the history of this approach and related i.t.a.'s main features to teaching methods and children's needs in the learning situation.[2] In this paper I shall confine myself to presenting an up-to-date report of the results of the British experiments with i.t.a. for beginning reading.

## The Experiment

In the fall of 1960 I was asked to design and conduct experimental research into the effects of augmenting the alphabet in the beginning stages of learning to read. The alphabet chosen for this purpose was the i.t.a. (then known as the "Augmented Roman Alphabet") which was the invention of Sir James Pitman.[3] He proposed that young beginners should use the more simple and more reliable i.t.a. until they became confident and fluent in reading i.t.a. Then they should transfer their skill and confidence to reading the traditional orthography (T.O.) of English. Pitman had taken special care to design the i.t.a. characters and the rules for their use in spelling in such a way as to make it easy for children to transfer from i.t.a. to T.O.

To evaluate the effectiveness of i.t.a. for beginning reading we decided to compare the attainments of an experimental group of pupils starting on i.t.a. with the achievements of a matched group using only T.O. from the beginning. We have attempted to hold constant in the two groups all factors except the one critical variable of the alphabet and spelling used in beginning reading and writing. This includes efforts to match the two groups on the Hawthorne Effect.[4] Thus a difference in the achievements between the i.t.a. group and the T.O. group can be attributed to differences in the orthography.

## Results in the First Three Years

It must be emphasized that we still do not consider that our research has reached a point at which *final* answers can be given to the many questions raised by the use of i.t.a., and we would caution educators not to form definite judgments or final conclusions regarding i.t.a.'s use until the limitations of our present findings have been made good in the investigations planned for the next four years.

The most important limitation of this present report is that it can relate only to that part of the sample recruited during the school year September 1961 to September 1962. Thus the sample is relatively small for some of the results in this report, and final and best matching of i.t.a. and T.O. groups is not yet possible. However, we have investigated the composition of the i.t.a. and T.O. groups and have found no significant difference between them in respect of age, sex, social class and intelligence.

In this paper attention is focused on the group which has been under investigation longest in the British i.t.a. experiments, that is, the 413 children (and their T.O. control partners) who began to learn to read with i.t.a. in September 1961. We shall indicate also where there is confirmatory data from the three additional groups which began in January (106 pupils), April (143 pupils), and September (936 pupils), 1962.

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[1] John Downing. *The Initial Teaching Alphabet.* New York: Macmillan, 1964.

[2] John Downing. *The i.t.a. Reading Experiment.* London: Evans, 1964.

[3] I. J. Pitman. "Learning to Read: An Experiment." *Journal of the Royal Society of Arts,* Vol. 109, pp. 149-180, 1961.

[4] Full details of the experimental design and the composition of the sample are given in: John Downing, *The i.t.a. Reading Experiment.* London: Evans, 1964.

1. *More rapid progress through the reading program in i.t.a. classes.*

The beginner's load of learning appears to be greatly reduced when i.t.a. is the printed medium of instruction. To read books the i.t.a. pupil needs to learn:[5]

(a) Only one form of character (e.g., *b* only—not *B*).

(b) Only one whole-word pattern for each word of English. (e.g., *bit* only—not *Bit and BIT*).

(c) Far fewer print symbols for phonemes. (e.g. Only one symbol for the *oo* sound in *zoo, shoe, flew, do, through,* etc. instead of up to 30 different symbols in T.O.).

This reduction in the volume of learning appears to lead to a very marked increase in the beginner's rate of progress through the basal readers. After only five months the four and five year old beginners in the i.t.a. group using basal readers printed in i.t.a. were significantly ahead of the T.O. group using the same basal reader series printed in T.O.

By the end of the first school year the average i.t.a. pupil was on Book II of the reading program, while the average T.O. pupil was still at Book I of the same program. Half a year later the average i.t.a. child had moved to Book IV while the T.O. boy or girl had got to Book II. After two years the position was beyond Book V for the average pupil in the i.t.a. classes as compared with Book III in the classes using T.O. The groups joining our experiments in January, April, and September 1962 appear to be making the same accelerated progress through the reading program.

TABLE 1

Reading Primer Reached After 1, 1½ and 2 Years
(September 1961 Entrants)

| | i.t.a. Group | | T.O. Group | | Kolmogorov-Smirnov Test of Significance |
|---|---|---|---|---|---|
| | Median | N | Median | N | |
| After 1 year | Book II | 413 | Book I | 687 | Sig. at 0.1% level |
| After 1½ years | Book IV | 413 | Book II | 687 | Sig. at 0.1% level |
| After 2 years | Book V | 306 | Book III | 610 | Sig. at 0.1% level |

Thus the relief from the burden of T.O. redundancies appears to permit pupils in i.t.a. classes to get away to a much more rapid start in reading.

2. *Much improved decoding skill in i.t.a. classes.*

Recent researches by Durrell[6] in the United States and Elkonin[7] in Russia indicate that pre-reading training in phonemic discrimination produces significantly improved progress in beginning reading, and this suggests that we should not forget that English, like Russian, is written in an alphabetic code. Unfortunately for the American or British child the T.O. code for English is extraordinarily complex and inconsistent. I.t.a. appears to provide American and British children with a more consistent or, at least, a less complex code than T.O. in three ways:[8]

(a) i.t.a. is very much more consistent in the way that it signals English phonemes (e.g. i.t.a. does not use the letter *o* to represent different sounds as T.O. does in *do, go, women, gone, one,* etc. In i.t.a. these different sounds are appropriately signalled by different print symbols).

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[5] For detailed discussion of reduction of volume of learning by i.t.a. see p. 71 of John Downing. *The i.t.a. Reading Experiment.* London: Evans, 1964.

[6] D. D. Durrell and H. A. Murphy. "The Auditory Discrimination Factor in Reading Readiness and Reading Disability," *Education.* Vol. 73, pp. 556-561, 1953.

[7] D. B. Elkonin. The Psychology of Mastering the Elements of Reading. Eds. B. and J. Simon. *Educational Psychology in the U.S.S.R.* London: Routledge & Kegan Paul.

[8] For detailed discussion of the features of the i.t.a. code see pp. 73-74 of John Downing. *The i.t.a. Reading Experiment.* London: Evans, 1964.

(b) i.t.a. removes the ambiguity of direction of reading which exists in T.O. (e.g. in T.O. in the word *bone* the first sound is signalled by the first letter on the left, but the second sound is signalled by letters two plus four and the child must *reverse* from right to left to read the final sound signalled by letter number three. In i.t.a. the left to right rule of reading is never broken, thus bœn).

(c) i.t.a. reduces the complexity of the print code for phonemes (for example the two letters *oe* are used in T.O. to represent a different sound in *toe* from either of the sounds indicated by *o* and *e* separately in *got* and *get*. In i.t.a. a special character is used for this sound always—thus œ in tœ and *o* and *e* are reserved for their own particular sounds).

This attempt to make i.t.a. a more reliable code for young English-speaking beginners in reading seems to have produced the most dramatic results in the British research into i.t.a. Pupils in the i.t.a. group have demonstrated great superiority in word-building. For instance, on the Schonell[9] graded word reading test, the average child in the pioneer group of i.t.a. experimental classes which had been set up in September 1961 could, in the following July (1962), read 19 test words or more on the i.t.a. version of the test, whereas the average T.O. pupil could read only five test words on the same test in T.O. Half a year later the average scores were 37 test words read correctly in the i.t.a. group and 11 in the T.O. group. Results from the twelve hundred entrants to the i.t.a. group have provided confirmation of this finding.

The greater regularity of the character to sound relationship in the i.t.a. thus appears to produce superior attainment in decoding printed English into speech. Other tests have shown that the superiority of the i.t.a. group is not confined to decoding. As we reported last year[10] the i.t.a. pupils are also significantly advanced in comprehension, accuracy in sentence reading and in speed of reading.

TABLE 2

DECODING RESULTS AFTER 1 AND 1½ YEARS
(SEPTEMBER 1961 ENTRANTS)
SCHONELL GRADED WORD READING TEST

| | i.t.a. Group | | | T.O. Group | | | Kolmogorov-Smirnov Test of Significance |
|---|---|---|---|---|---|---|---|
| | — | S.D. | N | — | S.D. | N | |
| After 1 year | 18.8 | 20.7 | 345 | 5.2 | 6.6 | 623 | Sig. at 0.1% level |
| After 1½ years | 37.1 | 20.7 | 345 | 10.9 | 10.6 | 623 | Sig. at 0.1% level |

### 3. *Superior reading after the transfer from i.t.a. to T.O.*

In the schools using i.t.a. each child makes the transfer to reading traditional print when he individually is ready for this step. A very few children have been transferred from reading i.t.a. to reading T.O. after only two or three months, but most appear to reach the necessary fluency in i.t.a. during the second year of schooling.

Fluency in reading i.t.a. is desirable before transfer to T.O., because Pitman's design of the alphabet has preserved in i.t.a. to the greatest extent compatible with the purpose of an easier beginning those same cues, generally situated in the top half of the line of print, which are employed in fluent reading of T.O. Contextual clues help pupils with that minority of words which do change drastically in appearance. When a high level of fluency in i.t.a. has been achieved the pupil should have the necessary skills of using minimal cues and contextual clues to ensure a smooth transfer.

Eighteen months after beginning with i.t.a. pupils achieve very superior scores on tests *printed in T.O.* The children who began with i.t.a. and later transferred to T.O. have read the latter with much greater accuracy and comprehension than children who have been learning with T.O. from the beginning.

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[9] F. Schonell, *Diagnostic and Attainment Testing.* Edinburgh: Oliver and Boyd, 1950.

[10] See pp. 74-78 of John Downing, *The i.t.a. Reading Experiment.* London: Evans, 1964.

For instance, a sub-sample of seven carefully matched pairs of i.t.a. and T.O. schools were selected from those who had joined the experiment in September 1961, and their pupils were tested on the Neale Analysis of Reading Ability.[11] After 18 months at school the average i.t.a. pupil scored 23 for accuracy and 8 for comprehension when reading the Neale test *in T.O.* as compared with scores of 9 and 4 respectively for the child who had been on T.O. from the outset. The i.t.a. pupil reads an average of 34 words *in T.O.* per minute as compared with 19 words per minute by the average child in the classes where T.O. has been the medium of instruction from the beginning. (This is in spite of the fact that only one-half of the pupils in the i.t.a. group had been introduced by their teachers to T.O. books).

TABLE 3

TRANSFER RESULTS AFTER 1½ YEARS

(SEPTEMBER 1961 ENTRANTS)

NEALE ANALYSIS OF READING ABILITY (FORM A)—IN T.O. FOR BOTH GROUPS

| | i.t.a. Group | | | T.O. Group | | | Kolmogorov-Smirnov Test of Significance |
|---|---|---|---|---|---|---|---|
| | — | S.D. | N | — | S.D. | N | |
| Reading Rate | 33.9 | 24.2 | 146 | 18.7 | 18.9 | 190 | Sig. at 5% level |
| Reading Accuracy | 22.9 | 17.4 | 146 | 9.3 | 11.9 | 190 | Sig. at 0.1% level |
| Reading Comprehension | 7.9 | 6.1 | 146 | 3.5 | 4.4 | 190 | Sig. at 0.1% level |

A later test of these children has provided further confirmation that i.t.a. beginners read T.O. with significant superiority. In the middle of the third year of schooling we tested the i.t.a. children (chronological age 7.1 years) on *the standard T.O.* version of the Schonell test. The average score for the i.t.a. group (including some pupils who were still on i.t.a. readers) was 34.4 test words *in T.O.*—the standard for age 8.4 years. The T.O. group's average score was 24.1—the standard for age 7.4 years.

4. *i.t.a.'s effects on writing and spelling.*

We have reported previously[12] that creative writing appears to be much improved in i.t.a. classes. Teachers claim that, for instance, "the standard of creative writing has improved almost beyond comparison." These claims are at present under objective investigation at the Reading Research Unit[13] but already, in her independent study of i.t.a., Southgate[14] has observed that "Free writing in the class appeared more spontaneous, prolific and correctly spelt than is usual with such young children."

TABLE 4

TRANSFER RESULTS AFTER 2 YEARS

(SEPTEMBER 1961 ENTRANTS)

SCHONELL GRADED WORD READING TEST IN T.O. FOR BOTH GROUPS

| | i.t.a. Group | T.O. Group |
|---|---|---|
| — | 33.9 | 24.2 |
| S.D. | 21.4 | 18.1 |
| N | 321 | 583 |

t—test t=6.9 sig. at .1% level

Two months ago we administered a T.O. spelling test[15] to both i.t.a. and T.O. groups. At the time of writing not all the answer papers have been returned but Table 5 shows the analysis of the data as

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[11] Marie D. Neale, *Neale Analysis of Reading Ability*. London: Macmillan, 1963.

[12] See pp. 40-42 of John Downing, *The i.t.a. Reading Experiment*. London: Evans, 1964.

[13] Michael Lyon, "A Study of Some Samples of Children's Free Writing in i.t.a. and t.o." Unpublished paper.

[14] Vera Southgate, Augmented Roman Alphabet Experiment. An Outsider's Report. *Educational Review*. Vol. 16, pp. 32-41, 1963.

TABLE 5

T.O. SPELLING TEST (SEPTEMBER 1961 ENTRANTS)
SCHONELL'S GRADED WORD SPELLING TEST A

OVER-ALL COMPARISON

| | i.t.a. Group (N-318) | t.o. Group (N-602) |
|---|---|---|
| Mean | 28.7 | 24.1 |
| S.D. | 16.4 | 14.0 |
| | t - 4.34 sig. at 0.1% level | |

yet available.

What is of great interest is that the i.t.a. pupils can by the middle of their third year of schooling spell in T.O. significantly better than the children who have been reading and writing with T.O. for the whole time.

Although the spelling test was administered to both groups of children in T.O., 49 (15 per cent) of the 318 i.t.a. children had not transferred to T.O. at the time of testing. It should be emphasized that these spelling results are incomplete and that the background information of the two groups in terms of intelligence, sex and social class, has not been determined in time for this report.

An interesting point on spelling is provided by one principal who reports that her children, after reading and writing *cum* in i.t.a. and then later being transferred to T.O. and instructed to write *come*, generally do spell this word *come*, whereas in the T.O. class, where T.O. *come* has been used from the outset, many of the children persist in writing *cum* which no one has ever required them to write!

### Conclusions

In conclusion, although caution must be exercised in respect of the findings of this further interim report, the results of the i.t.a. experiment in Britain provide a further indication that a fruitful line of enquiry has been found.

At this present time, in the third year of the Reading Research Unit's experiment in British Infants' Schools, it does appear that i.t.a., designed as it is for ease of learning at the beginning and ease of transfer to T.O. at the second stage, does accelerate the acquisition of basic reading skills and that this primary training in i.t.a. is transferred to T.O. in such a way that a very substantial saving is gained in learning to read T.O.

## 6. The Lehigh-Bethlehem i.t.a. Study

ALBERT J. MAZURKIEWICZ

USING PITMAN'S notational system of 44 symbols for the 40 sounds of English for initial teaching in reading instruction, the following chronology of events marks the progress and reports observations on the first eight months of activity with the first grade population of the Bethlehem schools. The statistical description of the experimental and control populations noted below indicates, though small differences in the IQ means exist, that the populations are equivalent and that differences in results obtained in testing reading achievement may be accepted as a reflection of the different print medium used in teaching the populations. Both populations are using a language-arts approach to reading instruction in which writing is used as an aid to reading development, experience story use is emphasized, wide supplemental reading is encouraged, and variety in the basic material for instruction is promoted.

The lower scores noted in the i.t.a. population, while non-significant, are a reflection of what might be described as non-random assignment of children to classes based on readiness test findings

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[15] Schonell's Graded Word Spelling Test A in *Schonell Diagnostic and Attainment Testing.* Edinburgh: Oliver and Boyd, 1950.

TABLE I

POPULATIONS BY ALPHABET

|  | i.t.a. N=454 |  | T.O. N=874 |  |  |
|---|---|---|---|---|---|
| Variable | M | SD | M | SD | t Test |
| C.A. | 74.87 | 5.22 | 74.37 | 5.11 | .116 |
| IQ Language | 98.09 | 17.13 | 100.28 | 15.64 | .375 |
| IQ Non-Language | 99.36 | 16.92 | 101.93 | 15.93 | .435 |
| Total IQ | 99.00 | 15.26 | 101.34 | 13.57 | .398 |

administered in the spring, 1963. It was noted that one class included almost all of an intake of "verbally deficient" and Puerto-Rican children of one school. A suggestion that the principal had "loaded the dice" in making up his first grade classes was apparent. Nonetheless, the differences between the total populations are slight and represent a stratified sampling, on geographical—social—cultural bases, of the population.

Following two and one-half days of workshop training, fifteen first grade classes got underway in September, 1963. Workshop training included two elements of prime importance: how to write the alphabet and how to spell using the Initial Teaching Alphabet.

The methodology used emphasized the deciphering of the printed code by teaching children to associate each of the 44 symbols of i.t.a. with the spoken sound it represents. Simultaneously, reading activities that develop thinking skills were stressed to insure that children approach reading from the outset as a meaning-getting process.

Teaching was paced to the individual's rate of learning. A structure of whole group teaching from the outset was soon modified by these rates of learning. Small groups and individual instruction became the rule.

Initially, teachers were very anxious about using the Initial Teaching Alphabet in writing activities, showing concern about the correct spelling. After about three weeks, this anxiety disappeared and a new anxiety showed up typified in the question we all hear around the schools: "How far have the other teachers gotten?" After about six weeks, concern was shown that children were not reading "books"—that is, children *were* reading materials of various kinds (experience stories, sentences, words and phrases, and simple story content of pre-primer supplementary reader type) but statements such as "last year they'd be in a pre-primer by now" and "we aren't reading Book Two yet" indicated this form of anxiety.

At the ten-week mark, about 10 per cent of the population had completed *Book Two*. Observations and teacher reports indicated that these children could read and deal effectively with a vocabulary of 320 words. This compared favorably with about the same percentage of last year's grade population which used the traditional alphabet and achieved third pre-primer status in the co-basal program in the equivalent time. Under the T.O. procedure children could read 66 words on a purely sight basis.

At the beginning of the fifth month of instruction, significant differences in the reading and writing abilities of the i.t.a. population from the control population were observable. A range of achievement existed from the ability to write connected discourse of several paragraphs of seven to nine word sentences down to the ability to write the words which could be constructed from whatever number of sounds were mastered by a given child.

In examining achievements of the control and experimental populations at beginning of the sixth month of reading instruction, it was noted that no standardized test could serve adequately. It was further recognized that any transliterated informal test would be an adequate measure only if the instructional level achieved by a child on such a test did in fact agree with the difficulty level of the material he could read instructionally though the print medium be different.

The Botel Word Recognition Inventory was chosen as the test which seemed suitable for this purpose and was transliterated for use with the i.t.a. populations. As noted by Botel, an achievement of 70 to 80 per cent word recognition at any level indicated the child's instructional level.

The results below were achieved by sub-samples which represent a middle to upper class socio-economic segment of the population. The sub-samples were statistically equivalent in chronological age and IQ to the major populations.

TABLE II

WORD RECOGNITION LEVELS IN SUB-SAMPLE POPULATIONS (MIDDLE TO UPPER SOCIO-ECONOMIC LEVELS)

| Botel Inventory Instructional Level | ITA Population N-78 | Traditional Alphabet Population N-58 |
|---|---|---|
| 4 | 7 (9%) | 0 |
| $3^2$ | 21 | 0 |
| $3^1$ | 17 (57.7%) | 2 (3.6%) |
| $2^2$ | 5 | 1 |
| $2^1$ | 8 | 2 |
| 1 | 9 | 10 |
| P | 4 | 20 |
| PP and below | 7 (9%) | 21 (36.2% |

The picture of two sub-sample populations which are heterogeneous in intelligence (IQ 78 to 140) indicates first that it is entirely feasible to develop a high degree of reading skill (beginning third reader instructional level) by the end of the fifth month of first grade with a small segment of the population using the traditional alphabet and a language arts oriented basal program of instruction. However, the results indicate that some i.t.a. taught children achieve at a higher point in the equivalent time (fourth reader instructional level) and that a significantly greater number of children achieve third reader (or above) instructional levels. Almost 58 per cent (57.7 per cent) of the i.t.a. population achieved an instructional level of $3^1$ or higher on the transliterated Botel Word Recognition Inventory as compared with 3.6 per cent of the traditional alphabet populations who achieved third reader instructional status on the identical but T.O. form of the inventory. The median achievement of the i.t.a. population was at the $3^1$ level whereas the median achievement of the control group was at the primer level.

An examination of the lowest portion of this population, those achieving word recognition scores which classifies them as having an instructional level of Pre-Primer or below, indicated that only 9 per cent of the experimental population was found at this level as compared with 36.2 per cent of the control population.

At the beginning of the seventh month, children in the top groups were using i.t.a. materials which have readabilities extending from 2.6 to 3.2 and were dealing with such word recognition skills as contractions, possessives, and comparatives.

Transition was begun by a large segment of the population in the third and fourth month of instruction. Five to eight per cent of average classrooms (middle class populations) were reading T.O. materials at that time though instruction was continuing in i.t.a. materials, indicating that transition was evolving naturally. No confusion was evident in children's movement from one medium to the other.

Although word recognition skill was demonstrated (as noted above) as significantly better for the i.t.a. population the test of reading ability generally accepted is one which reflects the child's ability to deal effectively with a given reader not only in recognizing words but also in understanding the content.

The levels of the i.t.a. taught children in the eighth month of school indicates that 24 per cent of these first grade children are instructionally placed in third reader materials, 51 per cent are reading second reader materials, 15 per cent are reading first reader materials and 11 per cent are reading at or below a primer level. In contrast only 6 per cent of the children taught using the traditional alphabet (T.O.) are found in second reader materials. Seventy four per cent of this group are found in first reader material and a larger percentage (20 per cent) are found in primer or below materials than is seen in the experimental group. (Tables III, IV, and V are based on returns on 95.3 per cent of the population.)

Since over one-third of the experimental population is made up of the group of children usually described as "culturally deprived," a comparison of the achievement of the two groups shows a somewhat distorted picture. This large portion of the experimental population includes most of the children of Puerto Rican and Negro ancestry in the Bethlehem first grade population as well as most of the children of low socio-economic status and

TABLE III

TEACHER-DETERMINED INSTRUCTIONAL LEVELS OF THE TOTAL POPULATION

| Reader Level | i.t.a<br>N=451 | T.A.<br>N=814 |
|---|---|---|
| 3rd | 24% | 0% |
| 2nd | 50.7% | 6.1% |
| 1st | 14% | 74.4% |
| Primer or below | 11.3% | 19.5% |

as such (because of verbal or language deficiencies) negatively weights the experimental population.

Examining achievements of children with a similarly good socio-economic status, a greater disparity in achievement in favor of the i.t.a. population is seen.

TABLE IV

INSTRUCTIONAL LEVELS OF THE EXPERIMENTAL AND CONTROL POPULATIONS FROM GOOD SOCIO-ECONOMIC LEVELS

| Reader Level | i.t.a.<br>N=270 | | T.A.<br>N=612 | |
|---|---|---|---|---|
| 3rd | 108 | 40% | | 0% |
| 2nd | 144 | 53.3% | 50 | 8.2% |
| 1st | 15 | 5.6% | 496 | 81% |
| Primer or below | 3 | 1.1% | 66 | 10.8% |

Over ninety-three per cent of the i.t.a. population are reading second reader or above material (with 40 per cent at third reader) as compared with only 8.2 per cent of the T.O. group who are found at the second reader level. A significantly smaller group of the i.t.a. children are at the primer or below point, seemingly indicating a virtual elimination of the non-reader in the i.t.a. population while the frequently expected amount is found existing in the T.O. population.

An examination of the low socio- economic groups previously identified as containing children with bilingual and other language difficulties subsumed under the category "culturally deprived" shows marked achievement differences in favor of the i.t.a.-trained population.

TABLE V

INSTRUCTIONAL LEVELS OF LOW SOCIO-ECONOMIC POPULATIONS

| Reader Level | i.t.a.<br>N=181 | | T.A.<br>N=202 | |
|---|---|---|---|---|
| 2nd | 83 | 47% | | 0% |
| 1st | 48 | 26.5% | 110 | 54.5% |
| Primer or below | 48 | 26.5% | 92 | 46.5% |

Though reading levels and the degree of achievement found in the two populations favor the i.t.a. groups, differences in achievement in writing (as shown in creative compositions) is as marked. Furthermore, informal spelling achievement tests indicate that the i.t.a. trained group is experiencing high success (86 per cent accuracy) on words regularly spelled in either i.t.a. or traditional orthography.

Transition, begun by children in the top groups of each class in November and December, was started in April (1964) by the top groups as a formal procedure. This is based on a recognition of the most frequent traditional spelling patterns for sounds. As such it is seen to be the beginning of a formal spelling program. Teacher reports indicate that 65 per cent of the good socio-economic population are now (and have been for some time) reading traditional alphabet library materials of varying levels of difficulty, that this percentage of the population should complete the formal transition phase in a week or two and be reading only traditional alphabet materials by May 15th. Such reading will, apparently, be in third reader materials.

## C. PSYCHOLOGICAL FOUNDATIONS OF READING

### 1. Vision Readiness and Reading Readiness

LOIS B. BING, O.D.

EDUCATION* is developing many new approaches to teaching children to read. Psychology* is developing programs to facilitate the learning ability of children. Since much that is learned is by means of what is seen, and, since reading is normally a visual act, what of vision and its relationship to learning, and, to reading? There are those in optometry and allied fields who are concentrating on the study of the development of vision and how children can be helped to learn most effectively by means of what they see.

### Vision Defined

Vision,* when considered in relation to learning and reading, is a *complex process,* involving far more than the ability to discriminate small letters at a distance of 20 feet. Like hearing,* vision "is divisible into no less than three separate parts. These are (1) acuity,* (2) comprehension, and (3) perception. They are listed in this order since chronologically they develop in this order." Vision "is the over-all ability to transmit, integrate, and use the [visual] signal." This process, then, is the concept of vision employed in this paper.

### The Development of Vision

What have we learned about vision? In the early weeks and months of life a child has sight, and vision joins with sucking, and grasping, according to Piaget, to become *the primary avenues of learning.* Haynes'* research shows that as infants lie in the tonic-neck reflex posture, their eyes are aimed and focused on the extended hand—allowing the child to see and thus permitting vision to contribute to cognitive development. Stendler,* feels that infants' eyes need stimulation. They need light. Riesen's* work supports this. His study showed cellular deterioration in the visual cortex of the chimpanzees reared in darkness. Stendler further emphasized that the infant needs seeing experiences. Fantz's* work shows that infants like to look at targets with patterns. During the early weeks of life, seeing is largely with one eye reinforced by one hand. As the infant grows and develops and is more in a position to use two eyes, both eyes and hands come into the act of seeing. Now, the child must develop the highly complex skill of using both eyes and both hands together. At first, according to Getman,* the child learns mainly through the sense of touch, reinforced in *ever increasing amounts by sight.* During the first two years of life the child is in the sensory-motor stage. Evidence* is growing that in this stage it is most important that a child have an opportunity to move about freely, developing the use of both sides of his body, to crawl on all fours, to have many experiences with objects in his world, handling them and looking at them and being stimulated by them through as many of his senses as possible. *Play* is the important "school" of the child. Vision, touch, smell, taste, hearing, all interweave, as a child learns through his play activities. As the child grows and develops, vision should become more and more the dominant avenue by which he learns, extending his world from where he is and what he can touch, feel, smell, taste, and hear, to distant objects. By the time a child is introduced to learning to read he needs to have mastered his visual process. Besides seeing clearly, he must develop to a high level of efficiency the ability to move his *two eyes* together. He needs to be able to see as one what he sees with each eye separately, integrating the *two* images into *one* at a high level of efficiency. He needs to have had abundant experience integrating sensations so that his visual perception has developed to where he has good visual memory, ability to see form, note likenesses and differences in form, properly judge size and space relationships.

### Research Reports

Robinson* and Huelsman, investigating the relationship between visual efficiency and reading progress found:

> The only visual scores which consistently differentiated high and low achievers at these two grade levels involved binocular visual performance. Furthermore, four of the five (tests) utilized convergence and divergence skills. Not one of the current visual screening batteries include these tests.

In a study of vision and achievement in kindergarten, Kephart,* Manas, and Simpson compared school achievement (as measured by the Metropolitan Readiness Test) with measures of twenty visual skills and concluded:

> The results of this study demonstrate a substantial relationship between visual skills and school achievement at the kindergarten level.

Measures of eye movements, stereopsis, and visual efficiency at far and near distances were found to be particularly significant. Hinds,* reporting on a study of the relationship of vision to reading achievement in the first grade stated that children with poor functional* vision had poorer reading readiness and reading achievement scores and started formal reading at a later time than children with good functions.

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*Used to denote items for which additional information is given in a more comprehensive paper obtainable from the writer in limited number.

The Glenbrook study, likewise, showed a significant relationship between vision at the first grade level and achievement in reading. Furthermore, the first grade vision scores were found to be significant indicators of school achievement for the next five grades. Eye movement skills and visual efficiency scores showed highest correlations. No relationship was found between tests of visual acuity and school achievement.

Dietrich* and Flax compared scores on the CVAF (Children's Visual Achievement Forms) with educational achievement in grades one through four. Using the mean and standard deviation analysis of the data, there appeared to be *no* relationship. However, arranging the scores in deciles for plotting, the data showed that if a child scored *low* on the CVAF there was a marked relationship between his score on the CVAF and his achievement in the first grade. A score of 58 or above showed no relationship. The same curve was obtained from the data for grades two, three, and four. This could allow the interpretation that maturation, development, and the normal school and home experiences did not help those with low scores on the CVAF. Experimentally, we know that through programed vision care, which includes visual training, children can be helped to improve their ability to perform this visual motor test. This data also suggest the advisability of having therapy *early* in the child's school life.

Kephart* speaks of the importance of the consistency of the input data (initial visual sensation), saying, "the interference caused by minor defects is transient and interferes with the consistency of the information. The interference from the major defect is always present and therefore can be compensated." Held* found that changing the input data, through varying the amounts of prism before the eyes, interfered markedly with learning. Held's work also shows the importance of the early activity of the child—freedom to move about in space with an abundance of experience through manipulating objects. His subjects, for whom either the auditory or the visual input data was distorted by scientific control, made exact compensation for the distortion *only* when allowed to move freely about in space. *Just hearing* and *just seeing* were not enough.

Held's work and that of others have shown there is a motor factor in form perception. Zatoroshets emphasizes that "the perceptual process is not passive, it takes motor activity." Visual input* is variable. *The* important element of the visual input (or any input) is that it be consistent. In the area of comprehension and perception a composite of all sensory stimuli past and present takes place. These are incoded into an output, some of which go to stimulate resulting muscular activity and some serve as a feed back modifying the visual input. Kephart* states:

> In the perceptual process, this feedback-output pattern becomes in itself a part of input. As the feedback reenters on the input end of the system, it alters the input pattern and thereby calls for a new cycle of the perceptual process.
>
> Through the feedback mechanism, the process is perpetuated until an adequate response has been generated. The feedback is used as a control system which becomes self-monitoring.

If there is a deficiency in one sense modality the total output will be affected. If there is inconsistency of input, learning is seriously hampered through that sense modality.

In discussing vision we need to emphasize the importance of not considering vision in isolation. There are external and internal stress* factors affecting the child which will serve to alter the consistency of the visual input data. These need to be understood and included in a vision care program.

## Summary

Vision, as a complex process, is especially important at the beginning reading level. Many children are visually ready for reading by the first grade. Some children, due to various factors, do not develop their process of vision to a level at which they can learn at all, or learn easily, by means of what they see by the time they enter school. These children will need professional help with a fitting for glasses, visual training, and developmental activities before they can learn by means of what they see.

Consistency of input data, by whatever means believed to be best, is a desirable attribute of any method of teaching reading.* Shutting out interfering stimuli is desirable. Presenting the material at a distance will help some children. Testing programs should be used to know which children will need help *before* conventional reading readiness is initiated. School readiness should begin in nursery school and home activities. The wide range in cultural backgrounds of the children makes this imperative. Teachers (in lieu of, or as a helpful adjunct to a testing program) can be most effective in finding those children who will need visual help by recognizing symptoms* of visual difficulty children display in the classroom. Through the application of present day knowledge many children can be kept in their true achievement potential channel. Terms such as "word-blind," "psychological," and "emotional," can be used less as research seeks causes and finds programs to help these children. Let us not be content with labels, but rather resolve to continue searching for better answers to the problems of children.

## 2. Vision Motor Perception Program in the Brentwood Public Schools

LAWRENCE N. GOULD,
EDWARD HENDERSON and
RAYMOND L. SCHEELE

THIS PAPER describes the early development of the Vision-Motor-Perception (VMP) Program* in the Brentwood Public Schools.

The following are some of the elements of the rationale of the program:

1. Structural visual defects are related to functional visual problems.
2. Sensory motor activities are related to perceptual operations.
3. Adequacy of perception is related to cognitive growth.

**Theoretical Considerations**

The development of vision is part of the total body development. It is determined by sensory-motor experiences. These are the experiences which we can structure in the classroom. Specifically classroom experiences can be designed to increase the bilaterality of the body which affects the continued development of visual binocularity and reduces the stress of visual tasks by the reduction of convergence and accommodative demands as well as builds accommodative and convergence facility. Failure to organize these experiences has led to the instance of visual problems as shown by the increase in the percentage of children with functional and structural visual problems in the succeeding grades in elementary schools. The eyes, as well as the total body, are affected by the amount and type of stress that function places on structure.

If the child's level of confidence in his sensory mechanism is low so that it prevents him from accepting the information received by his brain, he will continually return to the source of the stimulus to reassure himself of the nature of that stimulus. The converse is the condition where poor control of the sensory mechanism initiates a low level of confidence in the received data. If we assume that the body continuously directs itself to receive a maximum amount of pertinent afferent sensory data so that it may better accommodate to the environment, poor neural coordination would prevent maximum assimilation. Assimilation would also be impaired by the inhibitions of one or more of the sensory mechanisms involved. Hebb states that learning is reinforced by the coordination of two or more sensory mechanisms. These factors would affect the centering and identifying mechanisms of the body in its response to the stimulus.

The cumulative nature of the actions helps to establish the individual's body image. Fisher & Cleveland (1958) discuss body image as "the individual's subjective experiences with his body and the manner in which he has organized these experiences. The assumption is that as each individual develops, he has the difficult task of meaningfully organizing the sensations from his body—*which is one*

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*We realize that any separation of vision, motor or perception experiences into single units is an artifice used only for purposes of examination and programing.

*of the most important and complex phenomena in his total perceptual field"* (our italics).

Werner & Wapner (1949) take the point of view that the body (body-image) as a field of sensation and experience must be taken into account in understanding perception.

Halpern (1964) postulates that the individual who has a well developed body-image, based on reality, is most capable of receiving afferent sensory data. It follows from this that the individual with the better body-image is then in a position to better interact with the environment, thereby increasing the foundation for the adequacy of perception.

Koffka (1935) comments that ". . . the local kinesthetic processes . . . in their entirety . . . help to organize the ego, (they) are not independent local events but part . . . (of) a larger system of events."

Included in this larger system of events are the motor and cognitive aspects of speech. "External speech" is a stimulus, or instigator, for organizing "inner speech" and "inner thought." External speech is a sensory-motor action that modifies the environment that influences the child. The control of motor activities increases when the task is accompanied by the "impellant action" of predominantly motor aspects of the child's own speech. This exclusively "grunting" stage is modified by the introduction of words into external speech, the cognitive aspect. Acting a second signal system in the body, external speech is gradually reduced and simultaneously acts as an organizer of internal speech. Luria and Vygotski conclude that, ultimately, internal speech affects the development of internal thought or cognitive processes.

Current psychological and physiological research and theory by Piaget, Hebb, Bruner, Smith and Smith, among others, has indicated that these cognitive processes derive from sensory-motor experiences.

A significant implication of this concept is that the greater the variety of sensory-motor experiences, the more numerous will be the resulting cognitive structures and the more numerous the cognitive structures, the greater is the variety of tasks that can be resolved.

Therefore, the kindergarten and primary grade curriculum should generate activities comprised of sight, auditory discrimination, proprioception, kinesthesia and speech as a means of enhancing the development of cognitive operations and as the means to reduce the rate of occurrence of functional and structural visual problems.

In the VMP program, then, it is proposed that as the child (1) increasingly succeeds in goal-oriented sensory-motor activities, (2) develops his body image, and (3) employs logical operations in classroom activities, he forms his self-concept as a learner. Through a positive self-concept, an interest in learning should be sustained.

## Classroom Implementation

It is emphasized that although we will be describing a number of classroom activities, these activities, in and of themselves, are not solely capable of achieving the intended objectives of the VMP program. Rather, it is the manner in which these are programed as a reflection of our total classroom philosophy that will determine whether the objectives will be successfully achieved.

A goal of the program is for the child to become a self-regulating and self-evaluating person, confident in his capacity to think. The child needs to develop cognitive flexibility, accepting, discarding or resynthesizing information to choose the appropriate cognitive strategy to meet the demands of a particular problem setting. Classroom teachers are to minimize value judgments on children's performances and to foster the child's flexibility in approaching a problem and his accuracy in communicating his conclusions.

## Motor Activities

All intellectual processes have their origin in sensory-motor activities. Initial emphasis is placed on behavior involving motor-coordination activities. These activities are programed in a developmental sequence from gross muscle to small muscle control. We recognize that there will be children who are already proficient in many areas of motor coordination when they enter school, but these students who have motor coordination skills will still benefit from parallel activities, and those lacking these skills will be given an opportunity to achieve them. After basic movement patterns involving gross motor actions have been learned, refinements of these activities are continued in game form. All of these activties are designed to stress the visual steering aspect of the body movements.

Since the concept of "body image" is considered to be essential to the child's ability to function in formal learning, great emphasis is placed on programing experiences that strengthen his "body image." The progression of these activities proceeds from gross to small muscle activities and from overt to covert activities such as space conceptualization. The gross activities stress recognition and control of various parts of the body.

The progression is from overt to covert motor activities. Examples of covert activities are the mental images of or descriptions of overt activities of the past or the future. In all cases there is a mental synthesis of elements of past overt sensory-motor experiences. A simple example reflecting this relationship between overt movement and covert cognition is the child describing directions for movement and the areas passed in traveling from his classroom to some other area in the school, or from the street outside his home to his bedroom. The complexity of this task is increased when estimations of relative distance are given. When the child thinks of what he does when he leaps, skips or plays any particular game, or when he verbally describes these by giving directions to another on how to perform these acts he is engaging in a covert mental activity derived from past overt experiences.

These activities may be communicated orally, in written form, or in graphic form as with a representative map of directions. The written form is dependent on the level of the child's ability, and, when adjusted for the complexity of description, may be used at different grade levels.

Motor activitiees, overt and covert, are programed as both full-period activities and as short one to five minute activities during the breaks in the classroom day.

### Vision

Vision is a motor activity and responds to training. Games and activities which increase the control of extra-ocular muscles include those designed for pursuit and saccadic movements. Pursuit movement is the smooth continuous action of the eyes in following a target whereas saccadic movement is the discrete movement of the eyes from one fixation point to another. Both of these movements are used in reading. For pursuit movements the VMP program utilizes a pendulum-type of apparatus in the classroom that the children follow with their eyes; also, a wood or plastic bead strung on a stiff wire that is manipulated by the child while his eyes follow the bead sliding on the wire.

Chalkboard activities emphasizing laterality of body movement and visual steering of movement are also used in kindergarten and first grade. Chalkboard activities position the child approximately 12-18 inches away from the chalkboard. With a piece of chalk in each hand and with his eyes fixated on a mark on the board, at nose level, the child moves his arms so that they trace on the board large circles on either side of his fixation point. The bibliography of both Getman and Kephart give a more detailed discussion of these procedures. This kind of activity tends to increase facility in eye-hand coordination and bilaterality. It might be noted that all of the game activities incorporate means that are used to link motor movement with its visual component. For example, in the game," "Angel in the Snow," the eyes are used to follow the movement of the arms and/or legs. This type of activity is prerequisite replacing actual body movement by visual scanning when relating to an object in the environment.

The design of the classroom activities also emphasizes directionality of movement and location of objects using the body as the point of reference. In the physical games, movement patterns are required that stress the sides as well as the upper and lower parts of the body. The ability to discern and control the quadrants of the body—the child's implicit knowledge of directionality—internalizes the body image incorporating an explicit awareness of direction and its relation to the surrounding environment. The speculation is that the program will provide an experimental sensory-motor common denominator upon which curricula can be organized to stress the development of specific cognitive operations (i.e., identity, addition and subtraction; these being the elements of formal thinking, the final stages of cognitive growth in Piaget's theory). Activities that are heavily weighted in motor coordination are paralleled by those which give experiences to the child which emphasize cognitive operations

### Perception

One of the tools which has been effective for presenting the material to be used in cognitive operations is the tachistoscope. This device is used to project various slides at 1/25th of a second to which the child responds verbally or graphically. We hypothesize that by using the tachistoscope the child will be more able:

1. To systematically distribute his visual concentration both at near-point and far-point visual tasks through practicing changing visual fixation from a distance to a near-point task, and by practicing centering and visual identifying ability.*
2. To develop an increased attention span.
3. To develop an increased ability of recall.
4. To describe a visual image by either speech or graphic presentation.
5. To receive and follow directions (auditory skills).
6. To maintain a positive self-concept as a successful pupil by fulfilling tasks related to formal learning situations in classrooms. From this an interest in school and learning should be sustained.
7. To develop a visualization process that notes the part of, as well as, the totality of the visual stimulus.
8. To both analyze and synthesize two or more images through visual memory.

The level of difficulty of our units is progressively increased by decreasing the degree of differences required for discrimination. Great emphasis is placed on the noting of differences. Complexity of the design and the operations that are required are scaled on the basis of difficulty.

### Speech

An important aspect of the tachistoscopic units is the opportunity they offer for the child to develop verbalization skills. One activity requires one child to give verbal directions to another child stationed at the chalkboard who will, in turn, translate this description into a graphic representation. The teacher's tightly structured questions, too, are designed to evoke verbal and/or graphic responses that stress the concept of directionality.

### Evaluation of the VMP Program

A study to evaluate the VMP program is currently being designed. In this design, an attempt will be made to evaluate the (1) emergence of operations in thought, (2) development of self-concept, (3) incidence of visual anomalies and, (4) effects in formal school performance as the children move through the grades.

One pilot study of the effectiveness of the VMP program in developing readiness for school learning has been conducted. The Metropolitan Reading Readiness Test was administered for 262 kindergarten children in the VMP program and to 226 controls. The tests of differences between means showed that the VMP children achieved significantly higher mean score values for the subtests in sentences, information, matching, numbers, total reading and total readiness. These differences were significant at beyond the .01 level of confidence.

The program appeared to be slightly more effective with boys than with girls. The VMP boys obtained a total battery mean of 78.9 and the control group boys a mean of 72.8. The VMP girls obtained a mean of 80.1 and the control group girls a mean of 76.9.

It must be recognized that while this pilot study is indicative of effects of the VMP program, uncontrolled factors such as teacher differences, Hawthorne effect, or ability differences between groups could also be affecting these results.

### Implications

1. An evaluation was made of the

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*Centering is a term that is applied to a tropism of the body for any given type of stimulus, whereas identification involves a "fit" between the attributes of the stimulus input and the attributes of a category.

extra-ocular motor skills of some kindergarten children. A simple rating scale was used to note the degree of coordination and fluidity of pursuit and saccadic movements. The child's position on the scale was then compared to his score on the Metropolitan Reading Readiness Test. Empirically, there appeared to be a high degree of correspondence between the score of the ocular motility scale and those of the Metropolitan Reading Readiness Test. A high score on one was closely matched with a high score on the other and vice-versa. The implication is that the improvement in ocular motility would improve reading readiness at the kindergarten level.

2. In a recent pilot study by Wolf (1964) based on a limited sample of children watching educational television, children's eye movements were recorded on film, rated into three categories of movement, and then compared with their IQ scores. Results indicated that those children who showed the least amount of eye movement observing the screen were found to be in the higher IQ group. One could infer from the Wolf study, that when the complexity of the televised material increased beyond the possibility of assimilating the information from it, then the movement aimed at achieving accommodation ceased.

While the data from this study must be regarded as exploratory, it does relate to an hypothesis of the VMP program that can be investigated, namely, that the higher IQ child gains enough information with the initial fixation to enable him to relate to the visual object of regard without the continual searching movements aimed at securing relevant details that is the behavior of the child who places in the lower IQ group.

## Summary

The VMP program utilizes a curriculum which establishes a common base of sensory-motor actions for the students. Materials embodying specific cognitive operations that are fundamental, in Piaget's theory, to logical thinking are programmed into this curriculum. In general, a vast array of physical activities involving sensory-motor schemata will be correlated to cognitive activities involving formal operations and through this we expect to hasten the ontogenetic development of cognitive structures and to enhance the resulting cognitive ability of the child.

We believe that as a child improves the adequacy of his body image he will increase his ability to receive affereant sensory data and thereby improve his body image; concurrently, there will be a reduction in the incidence of visual anomalies. We further believe that the greater visual efficiency and the more adequate body image will allow for more effective assimilation and accommodation or adaptation thereby substantially affecting the ability to learn.

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## 3. Induced Myopia and Far-Point Perception

HOWARD N. WALTON, O.D. and
DELWYN G. SCHUBERT

MANY TEACHERS and reading specialists employ tachistoscopes, controlled readers, films and film strips as part of a reading improvement program. Practically all teachers use a chalkboard, flannel board, and flash cards for instructional purposes on one occasion or another. Teachers expect children to respond quickly to materials presented by these methods. Rarely, however, do these teachers devote attention to the sensory or motor skills required for effective far-point achievement.

### Statement of the Problem

In clinical refraction[1] visual acuity is determined by identifying letters of varying size at optical infinity (20 ft.). No precise time limit is applied, thus the subject has an opportunity to study each letter. Under these conditions Hirsch[2] has determined the approximate visual acuities for various degrees of myopia.

Weymouth[3] and Weston[4] emphasize the importance of considering the time factor in testing acuity.

Bartley[5] studied time and distance as related to visual acuity by the use of a single fine line which was shown randomly in eight different positions. He showed that as the distance is increased, the probability of correct performance diminishes. Also, when the exposure time is reduced the probability of correct response decreases.

The purpose of this study was to determine what effects varying degrees of artificially induced near sightedness has on far-point tachistoscopic perception.

### Equipment

The Keystone Standard Tachistoscope (Overhead Projector), model 1055, employing a 750 watt lamp was the basic instrument used in the investigation. Words exposed were part of the Dolch Basic Sight Vocabulary and Dolch Nouns from Keystone Tachistoslides.

### Subjects

Twenty-four seniors from the Los Angeles College of Optometry served as subjects in conducting this investigation. They ranged in age from twenty-one to thirty-eight years. Because of their backgrounds the participants were trained observers.

Information was obtained from each subject as to his

1. Visual acuity—Unaided right eye, left eye, and both eyes.
2. Distance correction—Prescription of right and left lens recorded.
3. Visual acuity through distance correction—Right eye, left eye, and both eyes.

It was required for this study that each student manifest 20/20 vision in each eye unaided, or with a correction.

### Procedure

All subjects (testing was done with small groups) were seated 20 feet from a beaded screen in a room having an illumination level of two foot candles. Dolch basic sight words from Keystone Tachistoslides: three, four, five and six; and Dolch nouns from slides one and two were exposed at 1/25 of a second in groups of ten. Exposure distances were varied so that the words flashed changed in size as follows:

| Letter Size of Words | Expressed as Snellen Fraction |
|---|---|
| 8.7 mm | 20/20 |
| 11. mm | 20/25 |
| 17.4 mm | 20/40 |
| 34.8 mm* | 20/80 |

*Approximates the size of chalkboard handwriting or printing.

By adjusting the diaphram of the flashmeter it was possible to maintain the same intensity of light, ten foot candles, for words flashed at all distances.

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[1] Irvin M. Borish. *Clinical Refraction,* 2nd ed. Chicago: Professional, 1964, p. 149.

[2] Monroe J. Hirsch. "Relation of Visual Acuity to Myopia," *Archives of Ophthalmology,* 1945, pp. 418-421.

[3] Frank W. Weymouth. *Vision of the Aging Patient,* Edited by Monroe J. Hirsch and Ralph E. Wick. Philadelphia, New York. Chilton Company—Book Division, 1960, p. 45-46.

[4] H. C. Weston. *Sight Light and Efficiency.* London: H. K. Lewis & Co. Ltd., 1949.

[5] S. Howard Bartley. "Some Relations Between Optical Resolution and Response," *Amer. J. of Opt.* and *Arch. of Amer. Acad. of Opt.,* Vol. 27, No. 7, July 1950: pp. 333-344.

Since each subject possessed 20/20 vision the initial ten exposures were words composed of 20/20 letters. If an accuracy of 80 per cent or better was maintained the procedure was repeated with convex spherical lenses which induced artificial myopia. The convex spherical lenses were increased in increments of .25 diopter for each of the four test sizes until the critical level of inaccuracy (20 per cent) was reached. In some cases this required 1.50 diopter spheres.

Lens changes were readily accomplished as each subject was equipped with a trial frame and lenses.

## Results

The results of the investigation are shown in tables I, II, and III. An interpretation of these data is contingent on a knowledge of the Bunson Roscoe[6] law which states that for a given photochemical effect, E, a definite quantity of energy is required, and this same result is obtained whether the intensity, I, is high and the exposure, t, short or conversely. It is interesting to note that while all subjects possessed 20/20 visual acuity approximately 50 per cent of the 20/20 sized words were missed and 72.7 per cent of the responses fell below 80 per cent level of accuracy.

Since a short exposure reduces contrast, we are therefore measuring the subjects' contrast sensitivity. As shown in tables I and II this same factor influences the achievement for 20/25 and 20/40 sized words, but to a lesser extent than the 20/20 sized words. This is because the larger sized words subtend a greater angle

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[6] Francis Heed Adler. *Physiology of the Eye.* St. Louis: The C. V. Mosby Company, 1950. pp. 461-2.

TABLE I

CORRECT RESPONSES FOR TEN EXPOSURES
(Expressed in Averages)

| Word Size (Expressed as Snellen Fraction) | Induced Myopia | | | | | | |
|---|---|---|---|---|---|---|---|
| | Plano | +.25 | +.50 | +.75 | +1.00 | +1.25 | +1.50 |
| 20/20 | 5.18 | | | | | | |
| 20/25 | 7.58 | 5.42 | 4.92 | 3.17 | | | |
| 20/40 | 9.62 | 9.25 | 8.33 | 6 | 4.46 | | |
| 20/80 | 10. | 9.75 | 9.46 | 8.96 | 8.54 | 7.17 | 5.5 |

TABLE II

PERCENTAGE OF RESPONSES FALLING BELOW EIGHTY PERCENT ACCURACY LEVEL

| Word Size (Expressed as Snellen Fraction) | Induced Myopia | | | | | | |
|---|---|---|---|---|---|---|---|
| | Plano | +.25 | +.50 | +.75 | +1.00 | +1.25 | +1.50 |
| 20/20 | 72.7 | | | | | | |
| 20/25 | 50 | 70.5 | 75 | 95.8 | | | |
| 20/40 | 4.2 | 8.3 | 20.8 | 50 | 62.5 | | |
| 20/80 | 0 | 0 | 4.2 | 12.5 | 12.5 | 41.6 | 62.5 |

TABLE III

| Word Size (Expressed as Snellen Fraction) | Plano | +.75 | Difference | % Loss |
|---|---|---|---|---|
| 20/25 | 7.58 | 3.17 | 4.41 | 58 |
| 20/40 | 9.62 | 6 | 3.62 | 37.6 |
| 20/80 | 10 | 8.96 | 1.04 | 10.4 |

at the nodal point of the eye and thus are more easily resolved.

It is significant that even a .50 diopter of induced myopia results in a decrement of performance with every letter size. Table III shows an even greater percent loss when myopia is induced by .75 diopter. These findings indicate the need for optimum visual acuity in far point tachistoscopic training. It is also evident that students with maximum visual acuity have an advantage in classroom situations demanding rapid and accurate interpretation of material at a distance. This advantage is also applicable to distance seeing outside the classroom.

It is apparent that larger letters provide for greater accuracy in tachistoscopic training. The minimum sized letter for far point training should be 34.8 mm (20/80), as smaller letters result in a decrement of performance even though the subject demonstrates 20/20 vision.

### Summary and Conclusions

Tachistoscopic training has been given for many years, yet little attention has been directed to the sensory and motor skills required for effective far point achievement.

The Keystone Standard Tachistoscope was used with twenty-four subjects to determine what effects varying degrees of artificially induced myopia has on far point tachistoscopic perception. The study has shown the following:

1. Larger letters provide significantly greater accuracy in far point tachistoscopic training.
2. The minimum size letter for far point training should be 34.8 mm (20/80). Smaller letters result in a decrement of performance.
3. Letters smaller than 34.8 mm. (20/80) may measure the subjects threshold of contrast sensitivity. Training with small letters would attempt to alter this threshold.
4. One half diopter of induced myopia results in a decrement of performance with every letter size used in the study.
5. Maximum visual acuity is essential for far point tachistoscopic training as well as other environmental distance seeing.

## 4. Language and Self: Fulfillment or Trauma? A Summary

CARL A. LEFEVRE

THIS exploration touches certain aspects of the role of language in psychology and culture; more precisely, it is an interdisciplinary foray into partially separate and partially overlapping areas of humanistic philosophy, linguistics, human growth and development, sociology, education, pedagogy. My particular topic is the multidimensional shaping—too often the *misshaping*—of otherwise normal young human beings through the processes of learning their native language. Attention is focused on the language-related skills of literacy as they are sometimes handled in the schools.

My years of teaching and study, and the testimony of students in language autobiographies, suggest that well-meaning adults often mishandle children learning language in ways that are deeply and permanently wounding. Much of this wounding is unnecessary and avoidable. We must develop deeper understanding and more humane techniques of instruction in language and the language-related skills of literacy.

Some children have healthy early experiences in their early learning of language, and are supported by familial affection; such lucky children pass easily through their neighborhood experiences and schooling and eventually learn how to read and write, with few traumatic experiences. But even such children suffer psychological damage if they are subjected to certain classical thwartings by one or more misguided teachers. The focus of this discussion is not upon the happy few, but on the unlucky ones. We must reduce the number, because the unlucky ones have been deeply hurt, and they are numerous.

### Language Autobiographies

Some of this material is adapted from my recent book, *Linguistics and the Teaching of Reading* (McGraw-Hill, 1964), and my own interdisciplinary studies; much comes from language autobiographies of my students. A language autobiography—a *linguistic* autobiography—is not an *auto* biography, but a language biography: the life story of the writer's own language from infancy. The language autobiographer must first have studied the structure of American English as an objective entity. Otherwise he will not know what he is looking for in his language growth. In preparation, he may call upon the memories of friends and relatives, tape recordings, baby books and pictures, scrapbooks, school papers, notebooks; but the main use of these helps is to revive his own early buried memories. The writing of a true language autobiography is the outcome of a deep inner searching. Preparing to write a language autobiography has much in common with self-directed therapy, with self-analysis; but writing a language autobiography does not imply neurosis.

Once learned, speech becomes automatic; the processes of learning it are forgotten; means of producing and controlling language became habitual and drop below the threshold of consciousness. Writing a language autobiography requires penetrating layers of unconsciousness that conceal the traces of early language memories. The process of learning one's language, if it can be made even partially conscious again through an imaginative reliving, is a mine of language-learning lore. This experience can sharpen a person's consciousness of what every human being must do, every American specifically, when he learns to talk. This consciousness yields knowledge, sympathy, and insight into the nature and processes of learning that every parent and teacher needs if he is to influence the child's language development positively rather than negatively.

### Interdisciplinary Areas of Language and Language Learning

Language and language learning are richly interdisciplinary areas; consequently students and teachers of the language arts should cultivate an amateur standing in language and culture, social psychology, psychology of language, normal and abnormal psychology, and psychotherapy, especially self-directed therapy.

The concept of *self,* while related to ego development and self image, is not meant to be a precise technical term. *Self* here refers to social role (class, race, sex), to individual personality (with emphasis on individuality), and to character. Following are some of the assumptions underlying this exploration:

1. Man is the only talking animal; language, primarily, makes man what he is.
2. Language makes possible human communication, cooperation, interaction: humanizing processes through which human babies may learn to become human beings.
3. Language is *human* behavior; it is *non-instinctive* behavior; it must be *learned.* And the language-related skills of literacy must be taught by the older generation and *learned* by the younger. We have much yet to learn about how to manage these language-related processes.
4. In objective *linguistic terms,* language is a communication system of vocal symbols; it is a complex system of intricate patterns understood in common by native speakers and native listeners. Linguists have analyzed speech scientifically; educators should study their findings in order to apply them in teaching.
5. In *psychosociological terms,* language forms a network linking inner man with outer events. The concept of the speech community embraces all links of the network.
6. In *philosophical terms* (also psychological, in one sense), thought itself is inner speech, unuttered; it may be outwardly expressed in speech, or in graphic counterparts of speech (handwriting, typewriting, and print).
7. In *home and school terms,* normal children demonstrate their mastery of the basic patterns of their native tongue by speaking fluently at an average age of six years. The fact that *normal children* come to school already having mastered the highly complex vocal symbol system of their speech community attests to their ability to think in abstract symbols, and to make effective use of speech in practical, everyday ways.
8. In *educational and instructional terms,* writing and print comprise secondary, derivative symbol systems representing

> the vocal symbol system of language. Control of the spoken symbol system — speech — precedes learning the graphic system. Learning the language arts involves grasping the interrelationships of these two distinct and separate, yet closely related, symbol-systems for human communication.

There would seem to be no theoretical reason why mastering the graphic symbol-system should not be as easy as learning the comparatively more difficult audio-lingual symbol system. Yet countless children fail to reach the necessary levels in reading and writing abilities to perform their school tasks adequately. Many adults are also functional illiterates.

## Where Do We Go Wrong?

There is no single answer to this question. Here I want to explore certain aspects of only one area of solution—language growth and development. But this is the most promising area to explore, because it has been the most neglected. Language development, including learning to read and write, is deeply integrated with the development of the whole child. Success in language arts is crucial to fulfillment of his potential as a human being, crucial to finding his personal role in his culture.

We often forget that human beings normally learn by trial and error. We forget that it is normal for children to learn by making mistakes, only gradually bringing their results into some approximation of their desires. Language learning is no exception to this normal method of learning. Long before the baby has any linguistic consciousness, he gleefully experiments with production of vocal noises; these noises, however, are speech sounds that through many trials and errors he will gradually select, keep, and sort, for conscious symbolic use in the structural system of his language. The baby does not know he is performing linguistic experiments; he is just playing.

This native spirit of linguistic play is our greatest single natural resource for teaching children the skills of literacy. It should be encouraged throughout school, in order to help children develop a free and fluent command of all language skills.

Every child must be granted the freedom to make his own mistakes, freedom to learn from his mistakes and to correct them in his own way and in his own time. There is no other way for him to develop. All I know of language development indicates that this principle—the freedom to make mistakes and to learn from one's mistakes in a natural, developmental fashion—applies perhaps more significantly to language learnings than to any other area. If teachers insist on instant and incessant correction of every so-called mistake the child makes in speech, reading, and writing, the child will learn to hate recitation, study, and composition.

## The Image of the English Teacher

I have repeatedly been depressed by the shock-reaction when a fellow American learns that I teach English. He and I, friendly strangers together in any casual meeting, have been having a pleasant chat, until he asks, "What's your racket?"

When he realizes that he has been having a relaxed conversation with an English teacher, he mutters, "I never did know much grammar." He escapes as soon as possible. In the same situation the teenager covers his mouth with both hands and blurts, "I'd better not say anything." He disappears.

This dread image of the language censor is something English teaching and the teaching profession must answer for. This image is created by the incessant interruption and correction of children in the middle of their sentences, when they are reciting in class or participating in a discussion. Not all teachers do this, but many do. This rude practice typically begins in the first grade and never stops.

Is it any wonder that so many school children prefer silence to speech? That so many prefer blank paper, or no paper at all, to writing, in view of the slashed and bleeding papers returned by some teachers? Altogether too many children learn a profoundly simple lesson: whenever they speak or write, they are wrong. And some of the worst English teachers, in this respect, are teachers of other subjects—shop, gym, science, social science, music—any other subject. It makes no difference.

### Puritanical Syndrome: Black Versus White Rules

Teachers, English and language arts teachers especially, accept the role of guardians of public morality in matters of so-called correctness in grammar and usage. Some teachers accept this role with an avenging fury. There is a puritanical rigidity in this black-and-white syndrome of correct and incorrect English. To provide classroom authority, there is an old book of so-called rules, disregarded outside the classroom, that a social compulsion demands be enforced. The old rule book goes on and on, through an inexhaustible list of wrong-headed proscriptions. All the examples to follow came from language autobiographies of good students.

One such rule forbids the use of the prevalent "It is me." Another commands the child never to use *who* instead of *whom*. Still another clarifies a point of usage: *"But* means *but* except when it means *except."* And "never use a conjunction to start a sentence, nor a preposition to end a sentence *with*."

### Misspelling: A Cardinal Sin

Misspelling has become a cardinal sin. The puritanical code of correct English dictates a stern insistence at all times on the correct spelling of all words, beginning with the first grade. Often lists of mysterious words must be studied, out of context, having no function for the child. In some classrooms, pupils are drilled on false, illogical, and misleading rules or precepts by which they are expected to spell words correctly by deduction.

Much of this instruction confuses and confounds the separate processes of (1) spelling individual words, (2) writing compositions, and (3) reading.

For example, "When two vowels go a-walking, the first one does the talking." This may be further clarified by the teacher's explanation that the first vowel says its name, or pronounces its long sound. Let us pass over certain facts of linguistics, such as (1) sounds are sounds, and letters are letters; and conversely (2) letters are not sounds and do not make sounds. Taking the rule at its face value —ignoring its high level of abstraction, ignoring its use of the literary devices of figurative language and personification—this so-called rule is simply misleading. Anyone can prove how misleading by making up his own lists of words spelled with such digraphs as *ai, au, ea, ei, eo, oa, oe,* and so on. An average list would have about half words that support the rule and half that conflict.

Or test the old familiar "*i* before *e*" rule by making up lists of words spelled with the *ei* and *ie* digraphs. "Neither had the leisure to seize the weird financier." Other contradictory and misleading rules supposedly govern plural spellings of nouns ending in *f* or *fe;* or words ending in silent *e* when a suffix is added.

Much of the foregoing spelling instruction is presented as *reading* instruction.

### Drill, Drill, Drill

Many children are dulled by constant "seatwork" drills on grammar and points of usage. One exercise will exemplify hundreds in English grammar workbooks. The pupil is asked to expunge three incorrect words, one in each of three pairs, all in a single sentence:

(Who's/Whose) dog got (lose/loose) from (it's/its) collar? Aside from its dullness, *this exercise deliberately presents three errors in written form, a possible source of lifelong confusion for a child.*

Dull and wrongheaded as so many of these exercises are, it is not simply drill on *wrongheaded* rules that is wrong; one can imagine a teacher full of the most up-to-date linguistics making the same mistake, *drilling away day in and day out* on modern certitudes. The real mistake here lies in attacking on sight every conceivable sin against the language.

### Two Great Ingredients

Successful teaching of reading and the English language arts requires two great ingredients:

1. Accurate and up-to-date knowledge of the nature, structure, and functions of the English language.
2. Humane teaching, based on an understanding of human growth and development, and the role of language therein.

We must deeply understand what language is and what it means, what it can mean, to every individual human being—children especially.

### Emotional Violence Against Children

Many adults carry scars inflicted by emotionally immature and unstable teachers.

Following is a summary of the accumulated feelings of a brilliant, gifted young woman, now married and a successful teacher of English, as she recalls them when she was in the upper elementary years. She had had severe problems with spelling and phonics, but here she talks of her bouts with English grammar.

> Grammar was the real bane of her existence. She saw no logical organization to it. When they made her learn a list of pronouns, she found that they function either as nouns or as adjectives. When she learned that adverbs end in *-ly*, the teacher yelled at her for giving the word *friendly* as an example.
>
> The result of these and similar frustrations was a girl who was afraid to express herself on paper for fear of making spelling errors or grammatical mistakes. She cried before writing each theme because she was so tied up worrying about errors that she could not transmit the ideas in her head to paper.
>
> Language was becoming cancerous for this girl. Every time she tried, she was criticized, and criticism was not something she took to readily. As a result of many traumas, she began to dislike school. She expended little or no energy on learning.

### Physical Violence Against Children

Language autobiographies of some of my best students have convinced me that more teachers than I would prefer to think indulge themselves in corporal punishment.

An in-service teacher in a graduate class, a young woman from an exceptionally warm and stable home, in her language autobiography wrote of her elementary school experience as follows:

> Two teachers held my progress in check. They were greatly feared by most of the pupils, for their tempers were often violent and their sarcasm no less wounding. Years later, one of them seriously injured a boy and was dismissed from her position because of it. She had banged his head against the chalk board. In my time, actual physical injuries were slight, but the fear engendered by these teachers was enough to scatter my wits. These experiences left a soft scar, not yet healed today.

### Nurturing Growth of Children's Language

Language is an intensely personal element of human nature, closer to the individual than his own skin. Within all speech communities, language is a powerful psychological and social bond, integral with personality and culture. Given the insights required to teach the skills of literacy, teachers and the schools may be able to strengthen the child's grasp of language so as to free him from unnecessary fears and restraints and enable him to perform socially in useful and personally satisfying ways.

The child will develop his uses of language throughout his life, to correspond to changing circumstances, immediate needs, ultimate ambitions. But to attempt suddenly and arbitrarily to change the dialect of the child's primary speech communities, as contrasted to helping him develop his uses of language and the skills of literacy over a long period of time, is an utter impossibility, better not attempted. Such an effort can only wound the growing child at a critical stage of his growth. If we try to change a child's dialect under the heading of teaching him to read and write, we will almost certainly fail in all three efforts: (1) we will not change his dialect, (2) we will not teach him to read, (3) we will not teach him to write. And we may well have launched the child on the road to dropping out of school and delinquency.

It is terribly wrong to confuse teaching the skills of literacy with an attempt to change the child's speech to conform to our notions of what is correct and incorrect. We should try to understand that differences between our prestigious ways of talking and the familiar ways he is accustomed to may shock the child as much as his substandard locutions shock us—his proper teachers. This is a simple fact of dialect differences.

If a dialect change is to be effected at all, it must be done finally on the initiative of the child himself. He must have decided to do it himself. Changing his dialect is a highly complex psychosociological process, involving his teachers, to be sure, and his family and childhood friends—but above all, it depends on the child's own emergent goals and aspirations, the image the child projects *for himself* of his future role in life. It is worse than idle—it can be traumatic—to attempt "corrections" of the child's developing speech when he is merely passing through phases of imitation and creation. He should be allowed to make his mistakes himself, without prompting from teachers, workbooks, and handbooks; he should be allowed to work out his mistakes for himself, with assistance but without too much purification from on high. In his own time the child will discover and make his own the language and the way of life suitable for him—if we do not interfere in unwitting, harmful ways.

Adults hoping to influence the child's developing language skills intelligently, humanely, and on sound linguistic principles will view themselves as models rather than as policemen of language.

## 5. Motivation and Reading

RICHARD H. BLOOMER

NOWADAYS when the teacher thinks of reading and motivation, she thinks of things magnificent: charts, puppetry, television, plays, etc. We rack our brains for new ideas and devices to motivate children to learn to read which can compete with those produced by the professional motivators, the television and advertising men. Perhaps the teacher's goal gets lost in this competition for magnificently motivating ideas. For the teacher, motivation is making a child want to learn to read, and after he has learned to read, making him want to read.

In our rush toward the ultimate in motivation, we often forget two basic facts relating to magnificent motivation. First, the ultimate in magnificent motivation depends upon novelty for its power, and may in fact, because of the newness, act as a distractor from learning. Second, we very often overlook the plain, simple techniques which have always been a part of the bag of tricks of every teacher, the relatively simple manipulations of the classroom, which, when practiced with care, can endlessly ply the power and force to teach and motivate reading.

Why talk about motivation? It is not done well enough, and in fact, is often overdone as compensation. By overdoing motivation we are actually fostering a problem which makes motivation more difficult.

The major element of magnificent motivation is newness. We are all attracted by something new. When a person gives a talk, he thinks up a new joke to attract his listeners. Newness in some senses is a fetish. As a culture becomes highly communicative, two things occur. First, people share more common experiences, and the outside limits of newness decrease. Second, because newness is motivating, people in the culture making a business of motivating us leave little that is new, and new experiences become old very rapidly. One problem in the television business is finding something new. The reading teacher is in no position to compete with this business.

But newness rules itself out. As people go through life stimulated by that which is new, they become adapted to newness; as newness becomes expected, it loses its motivating power and force. Thus, the magnificent motivation sows the seeds for its own destruction. While this destruction is a fairly long term process, it does occur in elementary school, and certainly in high school, where many drop-outs can no longer be motivated by newness within the limits allowed in the school, and hence find newness in experiences outside of the school curriculum.

Newness is an emotional experience. As an emotional experience increases in intensity, perceptual distortion also increases; consequently newness of an extreme variety will produce an emotional reverberation in an individual. If the newness is sufficiently extreme it will also produce a negative feeling or tendency to avoid newness.

In terms of the magnificent motivation, newness is also a distractor. It tends to force the learner's attention upon the newness and not upon the learning. Occasionally newness may be made to function directly as a part of the learning experience, but usually the newness is an overlay and learning is incidental. Studies on incidental learning indicate sometimes a little gain and sometimes no learning at all. While we need to know a great deal more about incidental learning, we may safely say it is certainly not as effective as intentional or motivated learning.

Third, motivation is specific to the learning itself. Hence, when more effective motivational devices are available to the teacher, it is questionable whether the amount of energy involved in constructing a magnificent motivation will in fact pay returns.

The teacher is an adult and the children are children. The magnificent motivation, while representing for the teacher only a slight degree of newness, may represent a wide divergence from familiarity for the child, and he may respond to such ambiguity with anxiety rather than with the desired learning. Not only the brain-damaged and mentally handicapped, but also the normal child may be over-stimulated or over-motivated, and thus adapted to such a level that he may not be able to use the emotional force later. One might ask if we are not making sophisticates of our pupils before their time.

Let us consider plain motivation, the manipulation of properties in the classroom to produce more effective learning. It does not require a great deal of preparation, but rather simply the organization of interests, time, competition, responsibility, and other simple things which can be utilized in any classroom without additional space and energy.

Children's interests more or less bridge the gap between the magnificent and the plain motivation. A child's interest has tremendous motivational force, and is something the teacher capitalizes on insofar as possible.

Children's interests really have two dimensions. First, specific interests; these do not last long but are highly motivating. The magnificent motivation attempts to create an interest; many interests, however, are already there.

A child's interest is closely related to his personality. The teacher's porblem is to get underneath the surface interest. Television is able to successfully compete with reading because it is constantly determining the extent of the child's motivation through sales tabulations, surveys, etc. We have recently completed a study at the University of Connecticut of motivation as related to book characters using as an index the number of times the book was checked in and out of the library. Those books receiving awards and picked by teachers and librarians as best for children tended not to circulate as much as others, and tended to have less plot and character conflict. The books liked by the children had lots of conflict and clear-cut differences between heroes and villains.

The classroom may be considered as a question-answer situation where the teacher is always posing a question and the child is always answering a question. In part an individual's motivation to answer a question depends upon whether he thinks he is going to be right, or the difficulty of the question. Questions may be made more or less difficult depending upon the mode of answer required, for questions may be answered in several ways. First, covertly, or inside oneself. Secondly, overtly where no one can hear. Third, overtly among people representing no threat, and fourthly, overtly in front of a total classroom. Thus, difficulty may be manipulated by means of the fact of an audience, its size, and status.

Keeping score is motivating. Scores can be compared with one's own previous performance, others' performances, in relation to time, etc. Applying tension to the pupil may increase his motivation by making the response more valuable. Competition between children increases the difficulty of answering the question.

Formalizing a situation is a peculiarly motivating device seemingly used only by teachers. We tell the child outright that we want him to be motivated, and he is. We tell him to do his best, and he does. It does not always work, but sometimes picks things up when necessary.

Properties are another medium for controlling question difficulty. Peculiarly, they are effective even when they bear no relation to the question. Notice some workbooks: the cover may be illustrated with rockets and jets, even though the words *rocket* or *jet* do not appear in the book.

The kind of answer you require bears relation to the question difficulty also. The pupil is more likely to give an answer when he is free to give his own nonspecific answer. When the required answer is highly specific it is more difficult in proportion to its size.

When the answer is present the difficulty may be varied by pointing to the answer to make it easier, or adding distractors to make it more difficult. Pointing to the answer is the easiest, next comes copying the answer. More difficult is the translation from one simple system to another, such as translating from written to oral or vice versa; and finally is the reorganization of parts of the answer, which includes first translation.

This paper has been concerned with a return to the simple, plain motivations structured from element's intrinsic to the classroom, and has argued against the magnificent motivation that costs the teacher time and energy while netting her relatively little. Skilled manipulation of the child and the classroom situation is not expensive and nets the greatest profit in terms of motivating learning.

## 6. The Perceptual Process and Success in Reading

N. DALE BRYANT

FOUR POINTS appear crucial to an understanding of the relationship between the perceptual process and success in reading. (1) Perception, while appearing deceptively simple, is a tremendously complex process with different types of impairment possible as a result of inefficiency in one or more of its elements or in their integration. (2) Perceptual efficiency is related to success in learning to read and to reading effectiveness, particularly at the low end of the scale where impairment, insufficient experience, and lag in development of perceptual adequacy result in reading difficulties. (3) While the reader is generally aware of perceptual handicaps, his reading errors give clues to the nature of his perceptual difficulties. However, these clues often need to be supplemented by more detailed diagnostic procedurees. (4) Perceptual training can reduce perceptual errors in reading and remedial teachers use techniques of discrimination training. However, more elaborate and general techniques are being evaluated and may become integrated into remedial reading.

### Nature of Perception

Perception is not the initial stimulation of the brain by an impulse from a sense organ such as the eye. Such sensations are essential to perception, however. Perception is the mental process started by sensations and it consists of organizing the sensory impulses on the basis of past learning so that they are meaningful to the person. For example, stimulation of the receptors in the eyes by an unknown word in an unknown language is perceived in terms of past experience as letter-like shapes combined to form a word and printed with a particular degree of sharpness, color, etc. Greater learning from past experience with words in this language would result in an automatic recognition of the word, its sound, and its meaning. The process of perceiving takes time, even though this time is only a fraction of a second. We are not aware of the process, only the end result. Gilbert (*5*) has shown that perception of words requires a processing time longer than a twenty-fourth of a second, regardless of how fast the material is exposed.

### Extent of Relationship Between Perception and Reading

Perception is an essential component of reading but, past a certain minimum level, the degree of relationship is not linear; it differs with the level of perceptual adequacy, with age, and with the tests used to measure both perception (a battery of tests is needed) and reading (word recognition is more influenced by perception than is general comprehension). One of the most comprehensive studies of perception in relation to reading is the one by Goins (*6*). She used a battery of perceptual tests with first grade children. One of the perceptual factors correlated .6 with reading success. Other studies do not consistently find such a high degree of relationship and with older children and different measures would not be expected to. Vernon (*12*) reviews many of the studies of the relationship between perception and reading.

### Perceptual Difficulties That Handicap Reading Success

The reading specialist is usually concerned with the low end of the scale in reading achievement and tries to understand how specific cases of reading disability have been influenced by perceptual inadequacies. A few of the most common factors that contribute to inadequate perception are described below.

### *Visual Inadequacy and Visual-Motor Problems*

Obviously, anything interfering with visual sensations will handicap reading ability. Robinson (*8*), among others, has reported research which shows that farsightedness and defects in muscle balance (i.e. lateral phoria) handicap a child in learning to read. However, most difficulties in perception do not arise in defects in the eye.

Motor adjustments must be continually made to fixate and focus the eyes on the words being read and to use both eyes together. Taylor *et al.* (*11*) in a study of over 12,000 students, Grade 1 through college, over the United States, showed that increased level of reading ability is associated with a reduction in (1) number of fixations, (2) number of regressions, and (3) in the early grades, duration of fixations. These motor adjustments are controlled in part by the emerging perception, and visual motor difficulties probably reflect perceptual difficulties, not just poor motor skills. Last year Wolf *et al.* (*13*) and Smith (*9*) reported that mini-movements or micro-movements occur within fixations and these movements correspond roughly to contours of a few letters within the words. Studies using new discoveries may help us understand more about visual-motor components of perception and reading success.

In addition to fixations, Flax (*3*) notes that using both eyes together and maintaining focus are extremely complex aspects of perception which, when defective, often cause reading difficulties.

### *Difficulty in Perceiving Details Within a Gestalt*

The reader must perceive the characteristics of the whole word and keep them in mind while at the same time making discriminations of parts or details. Reading disability cases usually make many errors by incorrectly identifying a word on the basis of its initial letter, its length, and its general shape. Often confused are such words as *them, thin, their, there, than,* and *then*. This difficulty in differentiating details within the words is probably the most common perceptual error made by reading disability cases. Goins' factor, referred to earlier as having correlated .6 with reading success, involved the ability to keep in mind a configuration against distraction. The tests with the highest factor loadings involved details within a gestalt so the perceptual difficulty reflected by the factor may be similar to the observed difficulty shown by reading disability cases in perceiving details while attending to a whole.

Since an immediate feedback of sound association improves visual perception, Bryant (*1*), the lack of *symbol-sound association* for letters and word parts contributes to perceptual errors (as well as directly causing reading failure even when perception is adequate). Particularly lacking in reading disability cases are well established, automatic vowel sound associations, and this lack contributes directly to perceptual errors of details within words.

### *Reversals*

Another common error of reading disability cases is in directional confusion which depends greatly upon maturation of neurological functioning. Regardless of cause, it is obvious that a child is handicapped in learning to read and in reading when letters may appear reversed and words or, possibly, even phrases may go in either direction.

## Recognizing Perceptual Inadequacies in Reading

Any teacher can examine the reading errors of a child and observe the number and nature of perceptual errors. Reversals are obvious and errors where letters are omitted, added, or substituted are almost as easy to identify. It is important to separate from the perceptual errors any mispronunciation due to incorrect sound association when the perception itself is correct. A pronunciation of hate for hat or hatee for hate are sound association errors, not perceptual errors. Consistent errors should be identified. A word recognition test and an oral reading test can provide the basic data for an analysis of perceptual errors and can be one of the most useful aids in diagnosing the nature of a child's reading difficulties.

### Remediation of Perceptual Difficulties in Reading

An understanding of specific difficulties is a first step since it is ridiculous for a teacher to use materials which include many perceptual discriminations the child cannot make. Simplifying material to that which the child can handle can be followed by simple discrimination training (e.g., having the child practice discriminating between similar words or words with similar word parts). Calling attention to the details in words can be aided by having the child trace or write words and fill in the blanks in incomplete words. Particular care must be taken in not requiring the child to abstract a common characteristic from a number of experiences. The experiences should be simplified so that the characteristic stands out. Reading disability cases typically have difficulty in abstracting perceptual characteristics or sound associations from the complex materials commonly used in developmental or even remedial reading. This is probably the greatest cause of remediation failure. Principles for such training are discussed elsewhere by Bryant (*2*).

Beyond the simple training in visual discrimination used by the teacher when a child learns to distinguish between two similar words, there is a much more extensive type of perceptual training. Developed by special education researchers and optometrists concerned with functional vision, these training techniques are directed toward children with relatively severe perceptual problems. This is quite common among reading disability cases. The children learn to coordinate their visual impressions with gross, as well as fine body movements. This work is extensively described by Kephart (*7*) and Getman (*4*). Spache (*10*) provides a useful summary and selected exercises for the remedial or classroom teacher. The reading specialist can expect many of these new procedures to become a regular part of remedial education.

### Conclusion

It has not been possible in such a brief paper to do more than sketchily explore a few points concerning the relationship between the perceptual process and success in reading. The crucial points are that individuals with reading disability (particularly children) are likely to have some difficulties in perceptual discrimination and, in some cases, this reflects basic perceptual inadequacies. The child is unlikely to be aware of the perceptual difficulties and the teacher will become aware of them only if she has a relevant orientation, and looks for the difficulties. Perceptual difficulties are obvious in word recognition and oral reading, but the deeper perceptual problems require a visual examination by someone concerned with functional vision and by a psychologist concerned with perceptual abilities. Simple remedial work involving discrimination between similar words and focusing of attention upon details in words is a step toward perceptual training. More comprehensive training is needed for cases with basic perceptual defects. In general, the reading specialist cannot work effectively without a constant awareness of the complexities of perception and the role of perceptual defects in handicapping success in reading.

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# PART V CO-SPONSORED MEETINGS

## A. CHILDREN AND ORAL LANGUAGE

**(A Joint Project of ACEI, ASCD, IRA and NCTE)**

### 1. An Overview of Oral Language Recommendations

MILDRED A. DAWSON

THE PUBLICATION, *Children and Oral Language,* was jointly prepared by the appointed representatives of four organizations: ACEI, ASCD, IRA, and NCTE. When the four executive secretaries and several other members met to discuss matters of mutual interest, it was decided that something should be done to promote improvement in children's oral language. A committee consisting of two members of each of the four organizations and headed by Helen Mackintosh met in January, 1963 and made plans for the contents, format, and individual member's responsibilities for a publication devoted to oral language.

The original plan to prepare an article to be published simultaneously in the four organizations' journals was abandoned when it became apparent that no single article would suffice to express all that needed to be said. The committee did prepare an abstract, or brief statement of a common point of view, which appeared in the November issues of the four journals. Meanwhile, work on the full manuscript continued, and eventually it was ready to submit to committees of the organizations for evaluation and suggestions for revision. Dr. Mackintosh and another member of the joint committee then made final revisions.

### Critical Importance of Oral Language

It is probable that oral communication is more important today than ever before. Opportunities and demands for effective speaking and listening are ever with us. In homes, radio and television keep us up to the minute in respect to the affairs of the local community, the state, the nation, even countries far outside our borders. In addition, we constantly meet face-to-face to speak and listen in club meetings, forums, and rallies. Daily there are negotiations among legislators, arbitrators, heads of government, and world-wide representatives in organizations like the United Nations, NATO, SEATO, and the Common Market. You and I, and people everywhere will prosper or languish helplessly as the result of negotiations where effective listening and speaking (or ineffective) are the means of deciding crucial issues.

The immediate importance of oral language is further highlighted as we consider the proportion of time we spend in using it. Some decades ago, Rankin found that 70 per cent of our time is spent in oral communication, with 45 per cent spent in listening alone. More recent investigations have yielded similar findings. Wilt, in studying the extent of listening in classrooms found that pupils spend 57½ per cent of their time in listening; and where there is listening, we may expect speaking.

The crucial importance of oral language is demonstrable on an entirely different basis: it lays a foundation for children's reading and writing. Burrows and others have made it abundantly clear that children should discuss thoroughly the topics about which they are to write so as to fill in any gaps in information, to correct erroneous ideas, and to organize thinking—especially in areas where firsthand experience is lacking and children have to depend on such secondhand sources as books, pictures, films, interviews, and other types of learning materials. Recently the research of Strickland and Loban have shown how closely the basic sentence patterns, speech rhythm, and vocabulary of children's oral language are related to proficiency in reading and writing.

For instance, Strickland found that children ranking high in silent reading comprehension use the common patterns of structure more frequently than do pupils with poor comprehension. Those comprehending well also speak in longer sentences and use elements of subordination more frequently. Pupils excellent in oral reading interpretation also use structural patterns more frequently and utter fewer short utterances than do their less able classmates.

## The Language Patterns That Children Bring to School

The level of a child's language usage reflects the type and quality of oral language used in his home. Typically he enters school with sufficient mastery of sentence patterns, vocabulary, and usage to enable him to get his ideas across whether his use of English is standard or not. However, the pupil who has heard standard English spoken and has consequently learned to speak so-called "good English" has an advantage over one who uses nonstandard language since he is using sentences and words that conform to those he will find in books and that he can carry over into his writing. Thus learning to read and write may be facilitated.

A teacher working with pupils whose oral language is nonstandard faces a real issue—to what extent such children should be encouraged to substitute standard forms for their customary nonstandard expressions. The position taken by the writers of *Children and Oral Language* is this: Of prime importance are the ideas which children express, and they should be encouraged to speak fluently and confidently, even though their oral language be somewhat nonstandard; correctness in speech should be held subordinate to the thinking and the oral expression of ideas. The teacher should accept whatever form of English each child customarily uses, especially at the primary level, and should avoid any treatment of nonstandard speech that will inhibit a child's desire to express his ideas. To quote from the manuscript: "Recent studies of disadvantaged children suggest that the hope of habituating every child to the oral use of standard English, *in the elementary school years,* is not feasible and may do more harm than good for the child's language growth." All would agree, I think, that a child should never be embarrassed by being made self-conscious about faulty speech, that he should constantly be encouraged to participate in oral language situations. Anyway, a child is likely to retain the level of language usage that has proven satisfactory at home and in the neighborhood. Even so, we may wonder how his continued use of nonstandard English may affect his efforts to learn to read and write standard English.

Actually, matters may not be as difficult as they seem. A potent influence is the child's tendency to imitate his teacher—voice quality, rhythm of speech, vocabulary, sentence structure, correct usage. Not only speaking but frequent oral reading by the teacher tends to affect the child's use of oral language. The pupil's ear grows accustomed to standard forms. Another helpful influence can come from role-playing. Recently in Portland, Oregon on a panel similar to this one, a member made an interesting observation to the effect that a child who uses nonstandard English will speak in his teacher's standard style whenever taking on the teacher's role. It would seem, then, that a child accustomed to hearing the good English of his teacher may abandon temporarily his less correct ways of speaking as he takes on the role of the teacher or any other adult who speaks in standard fashion. It might then follow that any such child would have little difficulty in learning to read and write standard English if there is sufficient role-playing to make standard forms familiar to ear and tongue.

A teacher's aim as he deals with the wide differences in children's speech should be to promote respect, even appreciation, for the various dialects used by the individual pupils. He himself should feel and register such respect; he should cultivate it in his pupils. There is no place for ridicule or adverse criticism. Who has not heard the speech of certain persons and thought to himself: "She's from the deep South," or "He must be from Massachusetts. I rather like to hear that *r* on the end of *idea.*" Indeed, one of the committee's concerns as we worked together was the likelihood that all Americans may eventually speak alike, that interesting dialects that so enrich our mother tongue may disappear. Differences in intonation, rhythm, rate, and enunciation make our language rich and appealing. We are a mobile population; we are travelers; we listen regularly to the standard English spoken on radio and television. We cannot avoid noting that differences are already disappearing as we listen to congressmen who come from different parts of the country—they sound pretty much alike, and the Senator from Florida may sound much like one from Illinois or Oregon.

### Competencies Subject to Training

The competencies that underlie effective speaking and listening are subject to training. Nichols found that listeners, even when attentive, forget half of what they have just heard and, after two months, have retained no more than 25 per cent. By direct training in the art of careful listening, Nichols enabled his college students to improve retention by 25 to 40 per cent. Trivette, working with fifth grade children, found that 77 per cent of her pupils improved in their ability to listen for main ideas, important details, and likely inferences. Competencies in speaking well can likewise be improved by tactful, pointed instruction as an integral part of various lessons. Rarely are separate lessons to improve competencies called for.

### Parents' Role in Developing Children's Oral Language

Parents must realize that they largely determine the style of speech used by their children—the sound system, the vocabulary, and grammatical structures and characteristics. Parents should also make a practice of encouraging accurate listening as they read and tell stories, give directions and explanations, and discuss issues with their children. In the interest of helping boys and girls to participate effectively in learning activities that involve oral language, they should endeavor to build independence, self-confidence, and out-goingness in their children. At all times, teachers and parents should be in communication so that the latter are kept aware of the school's program in language instruction in order that they may be supportive of the school's program to improve oral language. They should, in particular, work at broadening their children's experiences and talking these over so as to clarify concepts, add to vocabulary, and build "mental bank accounts" useful for undergirding school learnings and for helping children to make informed contributions in class discussion.

### Responsibilities of the Teacher

Every teacher must recognize the importance of each individual pupil and truly respect his oral contributions. At the same time, he should develop in his pupils a corresponding respect for the speech patterns of classmates, genuine feelings of courtesy in dealing with one another. He must realize that willy-nilly he will serve as a model speaker and listener whom his pupils will imitate—often unconsciously. Having noted the dialects and various forms of oral language that his pupils customarily use, the teacher will consider ways and means of capitalizing on such differences and thus enriching the children's mother tongue.

Day by day the teacher will provide and take advantage of multiple opportunities for children to participate in conversation, discussion, storytelling, dramatization and role-playing, oral reports, and purposeful listening. It is through actually using language that children's competencies in speech and listening develop, not by discrete drill exercises unlikely to affect children's customary ways of using oral language. Back of the situations that involve children's use of oral language is much learning of content as the teacher provides many and varied experiences that broaden and deepen the pupils' backgrounds of information.

Any good teacher is likely to provide a rich curriculum and give his pupils opportunities to talk over what they have learned; but even the best of teachers may find it difficult to know just when any particular child shows a readiness for abandoning nonstandard expressions and for speaking in a more literate style. It takes real insight for a teacher to sense that a child is ready to adopt standard English in his speech.

### Principles Underlying Measures to Improve Oral Language

In summary, we may identify certain principles for guiding programs for improving oral language. Here are some of them:

1. A child's speech is intimately related to personal development.
2. His oral language determines the quality of his reading and writing.
3. Teachers should put ideas before form.
4. Teachers should feel genuine respect for whatever dialect a child speaks.
5. Growth in a child's command over oral language leads to clarification of thinking, and vice versa.
6. The more inadequate a child's command of language, the more likely he will be blocked in some learning experiences.
7. Though a child's language patterns are pretty well set by the age of five or six, the competencies involved in using oral language are subject to training under skillful, tactful instruction.
8. Improvement is more likely to come through actual communication of ideas through speaking and listening rather than through separate practice and drill.

## B. AMERICAN EDUCATIONAL RESEARCH ASSOCIATION

### 1. The Substrata Theory: Human Physiology as a Factor in Reading[1]

FRANK R. DAVIS, JR.

THIS PAPER describes in part the results of a research study which extends the generality of the Substrata Factor Theory of Reading.[2] The paper has two logical phases. The first presents the conceptualizing utility of applying the subsystem transaction concept to certain physiological functions. The second describes the demonstration of a significant relationship between measures of these physiological functions and a measure of what is generally viewed as a psychological process, viz., speed of reading.

#### Substrata Factor Theory

Substrata Factor Theory holds that performance in the reading situation is explicable as a linear combination of interrelated neuro-psychological subsystems. The existence of these subsystems has been defined by high scores on certain measures of verbal performance, perception, or conceptual ability. In response to the stimulus of a reading situation a transactional organization of these subsystems is achieved. The resultant organization of subsystems is consistent with previous responses to similar stimuli, with modifications of subsystems due to intervening input, and with motivational perturbations. While subsystems are reorganized in ways to serve various ends devised by the individual, the peculiar organization of subsystems mobilized to serve a given objective is called a "working system."

Now, unlike certain other models the Substrata Factor Theory is not restricted to additive effects of identical elements. From the first, the implicit insistence on subsystem interaction meets the demand of contemporary neurophysiology theory by incorporating the concepts of open energy systems,[3] both facilitative and active inhibitory interaction,[4] and intentional behavior mediated by centrally regulated receptor events.[5] Thus, considered separately, subsystems are reciprocally related as agent and substrate; considered collectively, they constitute the substrate factors upon which input impinges. Hence we describe this schema as the Substrata Factor Theory.

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[1] This paper is based upon a segment of a research project supported by the Carnegie Corporation of New York, Jack A. Holmes, University of California, Berkeley, Principal Investigator.

[2] Frank R. Davis, Jr. *Speed of Reading and Rate of Recovery in Certain Physiological Subsystems.* Unpublished doctoral dissertation, Univer. of California, Berkeley, 1963.

[3] David Krech. "Dynamic Systems as open Neurological Systems," *Psychol. Rev.*, 1950, 57, pp. 345-361.

[4] Donald O. Hebb. "Intelligence, Brain Function and the Theory of Mind," *Brain*, 1959, 82, pp. 260-275.

[5] Karl H. Pribram. "On the Neurology of Thinking," *Behavioral Science*, 1959, 4, pp. 265-287.

The subsystems of a "working system" have previously conceived in the Hebbian model as brain cell-assemblies. To orient to "neurological memory subsystems" is wholly adequate to describe the cognitive behavior of a brain. *The brain, however, is sustained by a body;* and this is the concern of the present study. It is recognized at the outset that the body, in which there are discernible physiological subsystems, is only *indirectly* related to that grey mantle assigned the major role in cognitive behavior. Nevertheless, one cannot gainsay the importance of any physiological subsystem which provides data on the physiological condition of the tissue in which neural activity occurs. To orient to *functional subsystems* revealed through mutual covariant activity provides freedom to implicate neural, humoral, and structural measures. One who bases his policy of action on subsystem interaction theory may investigate *all* behavior, cognitive and non-cognitive, gross and minute, as transacting parts of a total organism, the suprasystem. In fact, the development of the thesis in this paper is contingent upon a clear recognition of Substrata Factor Theory which allows for the body's physiological subsystems to interact with the neuro-psychoeducational subsystems of the brain. The greater generality of such a subsystem interaction interpretation is realistic.

## Hypotheses

Two hypotheses followed from the purpose of extending the generality of the Substrata Factor Theory of Reading.

1. The *major hypothesis* proposed that a significant proportion of interindividual variance in reading rate would be contributed by variance of subsystems within the physiological domain.
2. Because open systems maintain a steady state, examining several equilibrating processes for evidence of a unifying factor was relevant to the major hypothesis. The *minor hypothesis* held that a subdomain, definable as "general efficiency of physiological recovery," would contribute the largest share of the predictable variance of reading rate.

## Data

Speed of reading comprehension (words per minute) measured before the eye movement camera appeared as the dependent variable. The 23 independent variables assessed various dimensions within the domains of physiological functions at basal level, cardio-vascular and respiratory adjustments after strenuous exercise, and psychophysiological response (PGR) to and recovery from startle stimulation.

A representative sample of seventy subjects was drawn from the California Adolescent Growth Study pool, Institute of Human Development, University of California, Berkeley.

## Identification of Subsystems

Functional subsystems were defined analytically as the clusters of variables resulting from a cluster analysis of the 23 variables.[6] Twelve variables were deleted as possible definers because they failed to meet the criteria of (1) communality equal to or greater than .40 and (2) correlation of at least .60 with a cluster centroid. The remaining 11 variables defined the five interpretable subsystems listed below. (Defining variables are given in parentheses.)

I. *Oxygen Transport Efficiency* (increment in oxygen intake and rate of recovery of oxygen consumption after exercise).
II. *Psychophysiological Arousal Level* (prestimulus palmar conductance level and PGR magnitude).
III. *Structural Growth* (weight, height, and skeletal age).
IV. *Psychophysiological Reactivity* (frequency of psychogalvanic response and PGR latent time).
V. *Physiological Maturation* (basal oxygen intake rate and age at 90 per cent mature height).

For each subject, subsystem-domain scores were calculated from the defining variables.

An unexpected finding was that chronological age failed to satisfy the criterion for inclusion in either of the subdomains, *Structural Growth* or *Physiological Maturation*. However, because of common usage in educational research, it was retained as a unique-variable "cluster" for the next analytical procedure.

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[6] Robert C. Tryon. "Cumulative communality cluster analysis," *Educ. psychol. Measmt.*, 1958, 18, pp. 3-35.

### Organization of Working System Hierarchy

A substrata factor analysis was executed on seven dimensions. Reading rate was used as the criterion variable. The six independent variables were the five physiological subsystems and chronological age.

Figure 1 presents the schema of physiological subsystems in the working system of reading rate. The major criterion, *reading rate,* is placed in the circle on the left. Arrayed in boxes from left to right are the four dimensions selected by the analysis. The numbers above the arrows present the strength of the interaction in terms of the adjusted per cent of variance contributed by the subsystem when in this particular hierarchical arrangement. Numbers below the arrows are regression coefficients.

Reading Figure 1 one finds 16.48 per cent of the variance in reading rate results from the combined contributions from the subsystem of *Oxygen Transport Efficiency* (12.36 per cent) and the dimension of *Chronological Age* (4.12 per cent). At the next order, 5.11 per cent of the variance in *Oxygen Transport Efficiency* is determined from the variance in *Physiological Maturation.* At the third level, are two factors remote from reading rate but analytically selected into the hierarchy. The domains which interact to determine 30.90 per cent of the variance in *Physiological Maturation* were the subsystem *Structural Growth,* contributing 29.31 per cent and the dimension of *Chronological Age,* with a small but significant contribution of 1.59 per cent.

### Interpretation of the Working System Hierarchy

*Level I.* It must first be clear that a high domain score on the subsystem *Oxygen Transport Efficiency* indicates efficient adjustment of the body's oxygen transport mechanisms in meeting sudden increases in oxygen need. Secondly, the negative regression coefficient informs us that *high* ratings (promptness) in this physiological process tend to be associated with *low* ratings (slowness) in reading rate.

How is such a relationship possible? Research in exercise physiology provides evidence that increased efficiency in oxygen transport is a sign of a specialized organismic adaptation induced by a high

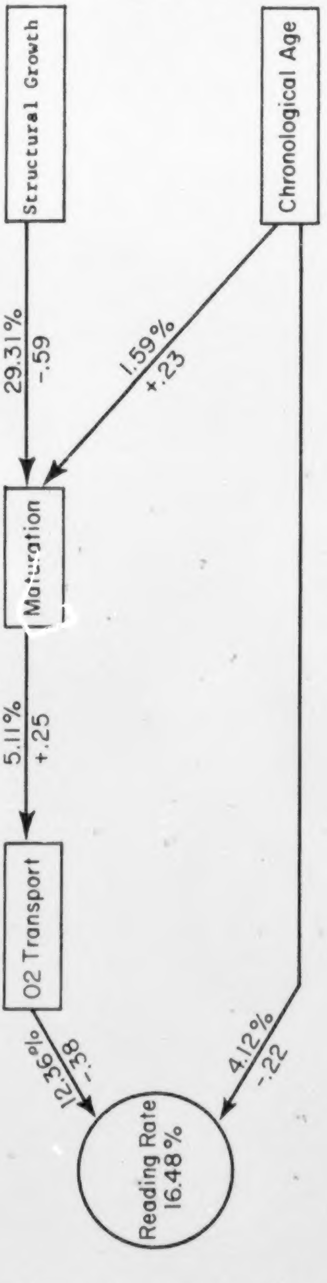

Figure 1 Schema of Physiological Subsystem-Domains in the Working System of Reading Rate

level of muscular activity, e.g., athletic training. Athletic training, however, was not in the experience of this sample of children. It is reasonable, then, to assume that the major source of variation in this subsystem is the idiosyncratic motor activity patterns of children. The individual degree of activity intensity is manifested in infancy, and by late childhood it becomes a well-recognized personal trait and a key anchorage point in the self-concept system. The effect on reading rate accumulates as year after year a child's self-selected behavior and his motor activity "need" reciprocally facilitate each other. By the time the junior high school years are reached, extensive involvement in motor activities reduces the probability of self-selecting activities which provide practice in an advanced reading skill such as speed of perception. Research is being developed to evaluate this speculation.

The ubiquitous finding of an inverse relationship between reading rate and age is more likely related to the tendency to non-promote poor readers in the lower grades than to any hidden physiological causes. *Level II.* Low domain scores in the subsystem *Physiological Maturation* are "good scores" in that they represent early maturing youth. Consequently, the positive regression coefficient means that early maturity predicts low *Oxygen Transport Efficiency*, and later maturity predicts better efficiency of oxygen transport at the present age.

It may be speculated that the activity patterns of the late maturers are more vigorous than those of their peers who perceive their emergent maturity and subsequently modify their activity intensity to meet the adolescent and adult cultural expectancy of specialization in motor behavior. For most this means reduced activity subsequently revealed by the lower score on *Oxygen Transport Efficiency. Level III.* It is not surprising that the subsystem of *Structural Growth* should be a major predictor of the variance in the subsystem, *Physiological Maturation*. What does arouse interest is their analytical separation. They are not the same! If one wishes to evaluate maturation, physiological development is more relevant than structural status.

The regression of *Structural Growth* on *Physiological Maturation* is negative. This means that a child in this sample who is advanced (scoring high) in *Structural Growth* would be close upon maturity, thus scoring low on *Physiological Maturation*.

The addition of the dimension of *Chronological Age* suppresses a portion of irrelevant or error variance, thus improving the joint relationship by a small but significant amount.

The two subsystems not selected are scheduled for further study because of their experimentally demonstrated importance to reaction time.

## Conclusion

The *major hypothesis*, stating that subsystems of the physiological domain would account for a significant portion of the variance in reading rate, was supported; and thus the Substrata Factor Theory has been extended to new and more fundamental levels.

The *minor hypothesis* was not supported. On the contrary, rather than a general domain of physiological efficiency, marked specificity was found. It was demonstrated that efficiency in one subsystem may be unrelated to or even incompatible with efficiency in another subsystem.

## Epilogue

It might seem reasonable to ask: Should we, therefore, restrain children from athletic pursuits so as to increase their speed of reading? The reply must be negative. For although a functional relationship was discovered, no direct causal effect of oxygen transport efficiency on reading is implied.

The explanation offered emphasizes the importance of the particular mode a child chooses in his efforts toward active environmental mastery. The kinetic level of a child is evident at least by toddlerhood and tends to be sustained through youth. Drawing support from behavioral genetics, the proclivity toward either a high or low activity level is proposed to be inherited. The differences in oxygen transport efficiency demonstrated in this research are suggested to be evidence that the biological support system of the body has adjusted to serve the idiosyncratic activity patterns as they have persisted over the preceding dozen years.

Therefore, acknowledging that oxygen transport efficiency is manipulatable, one should not predict such manipulation to have a causal influence on reading speed.

## 2. Sex Differences in Effectiveness of Teaching Machines Versus Women Teachers for Teaching Reading*

JOHN D. MCNEIL

VARIOUS theories have been proposed to account for the failure of boys to achieve as well as girls in beginning reading. Factors of growth, maturation, and development are considered most critical by some. Others have indicated that existing instructional content appeals more to girls. Negative treatment of male learners by female teachers is another explanation for inferior progress in reading by boys.

In the present study, 132 kindergarten boys and girls were given instruction in beginning reading by an auto-instructional device. The boys were superior in their learning by this approach. Subsequently, most of these children were placed in the first-grade classrooms of seven female teachers. Under the conditions of ordinary classroom instruction, the boys failed to maintain their relatively higher performance.

Explanation for this finding centered around the belief that whereas the teaching machine treated boys and girls alike, e.g., gave both the same number of opportunities to respond and the same words of praise, the female teachers did not. Furthermore, the relative independence from both live teacher and peer group interaction provided by use of a self-instructional device may have been important in helping aggressive male learners achieve superiority.

Testimonies were collected to show that these boys whose relative positions in reading declined under teacher direction were indeed those pupils who received more negative comments from teachers and who were given fewer opportunities to read, two conditions that were not present under auto-instruction.

### Subjects

The 132 children (72 boys and 60 girls) who completed the auto-instruction program as kindergarteners constituted the total kindergarten population at two public elementary schools. Their average chronological age was 5 years 6 months, and their average intelligence quotient was 107 with a range of 72-128 as measured by the Kuhlmann-Anderson Test of Intelligence. Before the experiment, the boys and girls did not differ on a pre-test of reading readiness that measured knowledge of letters, words to be taught, and ability to recognize likenesses in letter configurations.

### Direction of Programed Materials and Teaching Machine

The programed materials consisted of 17 daily lessons. Each lesson was made up of approximately 35 questions and informational frames. Forty words were taught during the program. The task of the child was to learn these words and to be able to read novel sentences composed of these words. A complete description of the materials is reported elsewhere.[1] The program was administered through apparatus that instructed ten or fewer children at a time. Each child sat in a cubicle equipped with head phones through which he heard a taped commentary. The cubicle contained a response and information panel. The child indicated his selection of the answer to a question by pressing one of three buttons on the response panel. A green light was shown when he was correct, and a red one when in error. A single screen at the front of the room was visible from each cubicle. On this screen, learners saw the daily sequence presented by film strip, while hearing an accompanying taped commentary.

### Description of Instruction by Female Teachers

In general, classroom instruction consisted of assignment of children into ability groups on the basis of the teacher's informal assessment of the child's readiness. Three reading groups were formed in most classes. During a period of four months, each reading group received approximately 20 minutes of direct instruction daily by the teacher and 20 minutes of daily follow-up or "seat work." Instruction usually followed the general procedures recommended to accompany the commercial reading material used, e.g., first grade reading materials produced by Scott-Foresman and Ginn and Company.

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*This study was performed as part of Cooperative Research Project No. 1413, United States Office of Health, Education, and Welfare, Evan R. Keislar, co-investigator. Appreciation is expressed to Janis S. Stone who assisted in the design and conduct of the present study.

[1] John D. McNeil and Evan R. Keislar. *Oral and Non-Oral Methods of Teaching Reading by an Auto-Instructional Device.* Project 1413 with the Cooperative Research Program of the U. S. Department of Health, Education and Welfare, 1963.

Data about the teachers' differential treatment of male and female learners was collected in individual interviews with children. A taped interview schedule was administered to each child in the seven classrooms. The schedule consisted of questions such as the following: "Name the children in your reading group." "Pretend you are in your reading group. Who is the teacher talking to when she says: 'Sit up and pay attention!' " (measure of negative comment) "Who doesn't get to read very much in your reading group?" (measure of opportunity to read)

### Results of Testing Under Conditions of Teaching by Machine Versus Teaching by Female Teachers

A post-test consisting of 51 multiple-choice items was given following the auto-instructional program. On this test, the boys earned significantly higher scores than the girls, boys $M = 30.3$; girls $M = 24.4$. A similar post-test was given after classroom instruction except that the words represented a sample of those taught by the teachers. Results from this test indicated a statistically significant superiority on the part of girls, boys $M = 31.7$; girls $M = 38.3$. An examination of changes in rank order on the two tests showed that 67 per cent of the boys dropped in rank, while only 27 per cent of the girls did so, indicating that there were variables within the classrooms of female teachers that militated against the maximum performance of young male learners.

### Teachers' Negative Comments, Lack of Opportunity to Respond and Progress in Reading

Children reported that boys received more negative comments from the teachers than girls ($X^2 = 13.2$, $p < .01$). With respect to opportunity for reading, it was found that boys were seen as given less opportunity to read ($X^2 = 5.7$, $p < .05$). Change in rank order in reading was correlated with the number of times the individual pupil was perceived as receiving negative comments from the teacher. The change in rank correlated .313 with negative comments, $p < .01$, indicating that those who received such comments did not maintain their progress in learning to read. Likewise, the change in rank order correlated with perceived deprivation of opportunity to read ($r = .238$, $p < .05$).

### Conclusions

Results support the hypothesis that teachers offer different treatments to boys and girls and suggest an association between teacher behavior and inferior performance in beginning reading. Teachers fail to adjust themselves or their school procedures to the behavior tendencies of boys as well as to those of girls. The findings that showed these same boys superior to girls in reading following auto-instructional procedures suggest that features of auto-instruction may be useful in teaching boys. Equality in treatment and the reduction of peer group interaction in learning to read through a self-teaching device, for example, might account for better performance on the part of male learners.

# 3. A Study of the Cloze Comprehension Technique in Relation to Structurally Controlled Reading Material

ROBERT B. RUDDELL

READABILITY research has attempted to combine numerous factors into formulae which will predict levels of difficulty of written materials and thus facilitate the reader's meaningful level of operation. The multiple-correlation coefficients derived by correlation of specific vocabulary and language structure factors with independent comprehension measures have produced coefficients ranging from .51[1] to .72.[2] The specific factors considered account for only 25 to 51 per cent of the variance in the comprehension scores. A large proportion of the variance is thus unaccounted for in the studies of readability which involve specific variables.

One of the basic problems in readability research centers about the adequacy of the test instrument used in measuring reading comprehension.[3] Recent application of a relatively new comprehension technique known as the cloze comprehension test would seem to hold promise for use in readability research. This is a test constructed by deleting every fifth word in a running series of at least 250 words. The test is then administered by asking the subject to attempt to complete the blank spaces which have been substituted for the deleted words. This method of test construction eliminates the language difficulty in the traditional comprehension multiple-choice question and the concept difficulties resulting from the wording and the type of question asked.

Most studies which have utilized the cloze technique up to this time, however, have considered a response correct only if it matches the exact word deleted from the original reading passage. The exact deletion method of scoring cloze comprehension responses has been utilized in research studies reported by Taylor,[4] Bormuth,[5] Coleman,[6] Rankin,[7], and Fletcher.[8] Only in a study by Taylor[9] involving 12 adults and three cloze tests has a synonym count scoring method been considered. Taylor compared the proportions of total scores associated with each of three cloze passages on an exact deletion and synonym count. His data indicated that, although the synonym count increased the total score, it did not improve the discrimination between passages. He concluded that the evaluation and scoring of synonyms appeared to be unprofitable. Thus research on the cloze comprehension technique has given little attention to the effect of the type of cloze comprehension response on the metrical properties of the cloze comprehension test and the effect of patterns of language structure on the discrimination power of the cloze comprehension test.

## Purpose

The purpose of this study was (1) to investigate the metrical characteristics, specifically the reliability and validity, of the cloze comprehension test in relation to an exact deletion method and a synonym count method of scoring cloze responses, and (2) to study the discrimination power of the two scoring methods of the cloze comprehension test on reading materials written with high and low frequency patterns of language structure.

The null hypotheses tested in the study were:

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[1] Edgar Dale and Ralph W. Tyler. "A Study of the Factors Influencing the Difficulty of Reading Materials for Adults of Limited Reading Ability," *Library Quarterly*, 4:384-412, July, 1934.

[2] Rudolf Flesch. "Measuring the Level of Abstraction," *Journal of Applied Psychology* 34 (December, 1950), pp. 384-90.

[3] Irving Lorge. "Readability Formulae—An Evaluation," *Elementary English* 26 (February, 1949), pp. 86-95.

[4] Wilson L. Taylor. "Cloze Readability Scores as Indices of Individual Differences in Comprehension and Aptitude," *Journal of Applied Psychology* 41 (February, 1957), pp. 19-26.

[5] John R. Bormuth. *Cloze Tests as Measures of Readability and Comprehension Ability*. Doctor's thesis, School of Education, Indiana University, Bloomington, 1962, 195 pp., typed.

[6] E. B. Coleman. "Improving Comprehensibility by Shortening Sentences," *Journal of Applied Psychology* 46 (April, 1962), pp. 131-134.

[7] Earl J. Rankin. *An Evaluation of the Cloze Procedures as a Technique for Measuring Reading Comprehension*. Doctor's thesis, University of Michigan, Ann Arbor, 1957, 221 pp., typed.

[8] Junior E. Fletcher. *A Study of the Relationships Between Ability to Use Context as an Aid in Reading and Other Verbal Abilities*. Doctor's thesis, University of Washington, Seattle, 1955, 95 pp., typed.

[9] Wilson L. Taylor. "Cloze Procedure: A New Tool for Measuring Readability," *Journalism Quarterly* 30 (Fall, 1953), pp. 415-33.

1. No significant differences will be found between the following two sets of reliability coefficients, calculated by the split half reliability coefficient method: (a) the coefficients for the cloze comprehension tests scored by the exact deletion method, and (b) the coefficients for the cloze comprehension tests scored by the synonym count method.

2. No significant differences will be found between the following two sets of validity coefficient: (a) the coefficients calculated between the scores on the cloze comprehension tests tabulated by the exact deletion method and scores on a standardized reading test of paragraph meaning, and (b) the coefficients calculated between the scores on the cloze comprehension tests tabulated by the synonym count method and scores on a standardized reading test of paragraph meaning.

3. No significant differences will be found between the means of the cloze comprehension tests written with high and low frequency patterns of language structure when scored by (a) the exact deletion method, and (b) the synonym count method.

4. No significant difference will be found between the following two correlation coefficients, as estimated by the statistic Epsilon, (a) the coefficient between the scores on the cloze tests tabulated by the exact deletion method and the frequency of occurrence of patterns of language structure used in the reading tests, and (b) the coefficient between the scores on the cloze tests tabulated by the synonym count method and the frequency of occurrence of the patterns of language structure used in the reading tests.

### Procedure

A series of six reading passages was written utilizing patterns of language structure which were found to represent a wide range of frequency in the oral language of fourth grade children. These patterns were used in the same proportional frequency in which they occurred in the oral language of fourth grade children. The patterns and frequency values were based on data collected in a study by Strickland.[10] Three reading passages (IA, IIA, IIIA) were prepared utilizing only those patterns found in the high frequency range occurring from 25 to 202 times (e.g., f = 202

A big rock could destroy the ship)
1 2 4

The patterns in the low frequency range, occurring from 2 to 15 times were similarly utilized in writing three reading passages (IB, IIB, IIIB) (e.g. f = 15
The leader gave the weary men
1 2 3
time to rest). The passages were equated
4
in difficulty at the 4.9 level of readability by controlling the variables of vocabulary and sentence length through the application of the Dale-Chall[11] readabiliy formula. The story content was controlled by limiting the subject matter to specific areas of science content. Cloze comprehension tests were constructed from each of the reading passages by deleting the fifth word from the beginning of each of the reading passages, and every fifth running word thereafter throughout each of the 254-word reading passages.

The tests were arranged in all possible combinations to minimize the possibility of order effects contaminating the data. The instruments were then administered to 131 fourth grade pupils randomly selected from the total fourth grade population in a metropolitan school district. This district was selected because it encompassed the identical schools from which the original fourth grade oral language recordings were obtained for the analysis of patterns of language structure in the study by Strickland. The paragraph meaning test of the Stanford Achievement Test, Intermediate Form, was administered the week preceding the administration of the cloze tests.

The cloze comprehension tests were then scored by two methods on the basis of two sets of criteria.

The exact deletion method counted a cloze comprehension response correct if the cloze item was the same word as the word deleted form the original reading passage. Phonetic spellings and spellings providing adequate information indicating that the response was identical to the deleted word were counted correct.

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[10] Ruth G. Strickland. *The Language of Elementary School Children: Its Relationship to the Language of Reading Textbooks and the Quality of Reading of Selected Children.* Bulletin of the School of Education, Indiana University, vol. 38, no. 4, Bloomington, July, 1962, 131 pp.

[11] Edgar Dale and Jeanne S. Chall. "A Formula for Predicting Readability," *Educational Research Bulletin* 27 (January, 1948), pp. 11-20, 28.

The synonym count scoring method consisted of a synonym count in addition to the exact word responses. Correct responses for the synonym count were determined on the basis of the following criteria:

1. The response must complete the original idea or thought expressed in the context of the sentence.
2. The response must fit the original syntactic pattern of language structure.
3. The response must be grammatically correct in terms of number agreement.
4. The response to a deleted cloze item which was a hard word, defined as a word not found on the Dale list of 3,000 words, must be a hard word.

Each of the six 50-item tests for the 131 subjects was scored a second time for both methods to insure correct scoring of items.

## Results

The reliability coefficients for the cloze comprehension tests were calculated by using the split-half reliability coefficient method with odd and even items and corrected by the Spearman-Brown Formula. The criteria necessary for the use of this method of determining reliability were met by the study.[12] The significance values between the correlations are presented in Table 1.

All correlations were significant at the .01 level. No significant differences were found between reliability coefficients in the cloze tests scored by the two methods with the exception of test IA, which contained extremely high frequency patterns of language structure .Thus, the first null hypothesis of no significant difference in reliability coefficients on cloze tests scored by the two methods was accepted, with the exception of the cloze test containing extremely high frequency patterns of language structure.

### TABLE 1

SIGNIFICANCE VALUES BETWEEN RELIABILITY COEFFICIENTS OF THE SIX CLOZE COMPREHENSION TESTS CONTAINING HIGH (A) AND LOW (B) FREQUENCY PATTERNS OF LANGUAGE STRUCTURE FOR THE EXACT DEPLETION AND SYNONYM COUNT SCORING METHODS

| Test | Exact deletion reliability | Synonym count reliability | Significance value |
|---|---|---|---|
| IA | .851 | .919 | 3.87* |
| IIA | .874 | .891 | .93 |
| IIIA | .878 | .899 | 1.20 |
| IB | .866 | .909 | 2.46 |
| IIB | .896 | .913 | 1.12 |
| IIIB | .899 | .916 | 1.16 |

NOTE: Significance value must exceed 2.58 to be significant at the .01* level of confidence.

The validity coefficients were calculated for (a) the cloze comprehension tests scored by the exact deletion method, and (b) the cloze comprehension tests scored by the synonym count method, by correlating each set of scores with the paragraph meaning test of the Stanford Achievement Test. The significance values between the two sets of correlations were then calculated. These data are presented in Table 2.

### TABLE 2

SIGNIFICANCE VALUES BETWEEN CORRELATIONS OF THE SIX CLOZE COMPREHENSION TEST SCORES, CONTAINING HIGH (A) AND LOW (B) FREQUENCY PATTERNS OF LANGUAGE STRUCTURE, WITH THE SCORES FROM THE PARAGRAPH MEANING SECTION OF THE STANFORD ACHIEVEMENT TEST, FOR EXACT DELETION AND SYNONYM COUNT SCORING METHODS

| Test | Exact deletion reliability | Synonym count reliability | Significance value |
|---|---|---|---|
| IA | .690 | .683 | .16 |
| IIA | .609 | .657 | .96 |
| IIIA | .693 | .721 | .67 |
| IB | .707 | .727 | .34 |
| IIB | .722 | .738 | .41 |
| IIIB | .713 | .727 | .35 |

NOTE: Significance value must exceed 2.58 to be significant at the .01 level of confidence.

All correlations were significant at the .01 level. No significant differences were found between the correlation coefficients. The second null hypothesis of no significant difference in validity coefficients between cloze tests scored by the two methods was thus accepted.

To test for significant differences between the means of the six cloze comprehension tests written with high and low frequency patterns of language structure the Scheffé[13] technique was employed. The findings of this analysis for the exact deletion method and synonym count method are found respectively in Table 3 and Table 4.

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[12] Harold Gullikson. *Theory of Mental Tests.* John Wiley and Sons, Inc., New York, 1950, pp. 198-210, 215.

TABLE 3

ANALYSIS OF SIGNIFICANT DIFFERENCES BETWEEN MEANS OF CLOZE COMPREHENSION TESTS CONTAINING HIGH (A) AND LOW (B) FREQUENCY PATTERNS OF LANGUAGE STRUCTURE, SCORED BY THE EXACT DELETION METHOD

| Test | IA | IIA | IIIA | IB | IIB | IIIB |
|---|---|---|---|---|---|---|
| IA | | (−)4.69* | (−)4.59* | .44 | (−).29 | (−).29 |
| IIA | | | .90 | 4.13* | 3.40* | 3.40* |
| IIIA | | | | 4.03* | 4.30* | 4.30* |
| IB | | | | | .73 | .73* |
| IIB | | | | | | .00 |
| IIIB | | | | | | |

NOTE: A mean difference must exceed 1.51 and 1.29 to be significant at the respective levels of .01* and .05—.*

The exact deletion scoring method resulted in significant discrimination between mean scores on cloze tests written with high (IIA, IIIA) and low (IB, IIB, IIIB) frequency patterns of language structure, with the exception of the cloze test (LA) written with extremely high frequency patterns of language sructure. In this case (IA), the mean score did not differ significantly from the mean scores of the tests (IB, IIB, IIIB) utilizing low frequency patterns of language structure. The third null hypothesis related to the exact deletion scoring method was not accepted, with the exception of the cloze test written with extremely high frequency patterns of language structure.

The synonym count scoring method resulted in significant discrimination between mean scores on the cloze tests written with high (IA, IIA, IIIA) and low (IB, IIB, IIIB) frequency patterns of language structure with one exception. This exception was the mean score for the cloze test written with the lowest of the high frequency patterns (IIIA) and the mean score of the test written with the highest of the low frequency patterns (IB), which did not differ significantly. Thus, the third null hypothesis, related to the synonym count scoring method, was not accepted, with the latter exception.

TABLE 4

ANALYSIS OF SIGNIFICANT DIFFERENCES BETWEEN MEANS OF CLOZE COMPREHENSION TESTS CONTAINING HIGH (A) AND LOW (B) FREQUENCY PATTERNS OF LANGUAGE STRUCTURE, SCORED BY THE SYNONYM COUNT METHOD

| Test | IA | IIA | IIIA | IB | IIB | IIIB |
|---|---|---|---|---|---|---|
| IA | | .03 | 1.03 | 2.39* | 2.54* | 2.80* |
| IIA | | | 1.00 | 2.39* | 2.51* | 2.77* |
| IIIA | | | | 1.36 | 1.51—* | 1.77* |
| IB | | | | | .15 | .31 |
| IIB | | | | | | .26 |
| IIIB | | | | | | |

NOTE: A mean difference must exceed 1.67 and 1.43 to be significant at the respective levels of .01* and .05—.*

In regard to the mean differences between the cloze tests scored by the exact deletion method (Table 3) it might be hypothesized that because a subject is more familiar with an extremely high frequency pattern he is also more familiar with a greater number of alternative response words that could be used in the blank replacing the deleted word. This familiarity with alternative responses might be expected to decrease as the subject's familiarity with the pattern of language structure decreases. As a result, a greater probability would exist in extremely high frequency patterns than in lower frequency patterns that the subject's response would not match the exact word deleted in a reading passage. This would not be expected to occur in the synonym count scoring method because an alternative response indicating the subject is comprehending the material is scored as correct. This hypothesis obtains support from an inspection of significant differences between means on the tests scored by the two methods. As was noted in the exact deletion count presented in Table 3, no significant difference was found between the mean for test IA, written with extremely high frequency patterns, and the means for tests IB, IIB, and IIIB, utilizing low frequency patterns. Mean differences for the synonym count, however, presented in Table 4, revealed a significant difference between the mean of test IA, written with extremely high frequency patterns, and tests IB, IIB, and IIIB, written with low frequency patterns.

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[13] William L. Hays, ***Statistics for Psychologists***, Holt, Rinehart and Winston, New York, 1963, pp. 483-487.

It is recognized that cloze comprehension tests will normally be prepared by using reading passages encompassing a wide range of patterns of language structure. However, the interpretation of cloze scores related to the comprehension difficulty of reading passages could be misleading should the above hypothesis be verified and should several of the passages under consideration be heavily weighted with extremely high frequency patterns of language structure. Further research on this problem is needed.

The correlation coefficients, as estimated by the statistic Epsilon, were calculated for (a) the scores on the cloze test tabulated by the exact deletion method and the frequency of occurrence of patterns of language structure used in the reading tests, and (b) the scores on the cloze tests tabulated by the synonym count method and the frequency of occurrence of the patterns of language structure used in the reading tests. The correlations and the calculated confidence intervals for the correlations are reported in Table 5.

TABLE 5

CONFIDENCE INTERVALS FOR CORRELATIONS ESTIMATED BY EPSILON BETWEEN CLOZE COMPREHENSION TEST SCORES FOR THE EXACT DELETION AND SYNONYM COUNT METHODS AND THE FREQUENCY OF OCCURRENCE OF PATTERNS OF LANGUAGE STRUCTURE IN READING TESTS

| | Frequency values in reading passages | | Confidence intervals |
|---|---|---|---|
| | $(\text{Epsilon})^2$ | Epsilon | |
| Exact deletion scores | .307 | .554 | .230 — .384 |
| Synonym count scores | .112 | .335 | .050 — .174 |

NOTE: Confidence intervals have been calculated at the .01 level of significance.

The correlation coefficients between the cloze comprehension scores and the frequency of patterns of language structure were .554 and .335 respectively for the exact deletion and synonym count scoring methods. Each of the coefficients was significant at the .01 level of confidence. The coefficients for the two scoring methods were significantly different as indicated by the mutually exclusive ranges for the two confidence intervals. Thus, the fourth null hypothesis was not accepted. This was interpreted to mean that in the exact deletion scoring method the frequency of occurrence of patterns of language structure accounts for a significantly larger per cent of the variance in the comprehension scores than in the synonym count scoring method.

## Conclusions

Within the limitations of this study it was concluded that:

1. The cloze comprehension tests scored by the exact deletion and synonym count scoring methods do not differ significantly in reliability, with the exception of the cloze test utilizing extremely high frequency patterns of language structure. In this exception, a significantly higher reliability coefficient was reported with the synonym count scoring method.

2. The cloze comprehension tests scored by the exact deletion and synonym count scoring methods do not differ significantly in validity as paragraph meaning measures of reading comprehension.

3. The cloze comprehension tests scored by the exact deletion scoring method and the synonym count scoring method discriminate significantly between mean scores on reading passages written with high and low frequency patterns of language structure, with two exceptions. The first involves the exact deletion scoring method, in which the mean of the cloze test written with extremely high frequency patterns of language structure did not differ significantly from the means of the cloze tests written with low frequency patterns of language structure. There is some evidence to suggest that this exception may be due to the subjects' familiarity with alternative responses in extremely high frequency patterns of language structure thereby decreasing the probability that the response words will match the exact words deleted and result in disproportionately lower scores when tabulated by the exact deletion scoring method. The second exception involves the synonym count scoring method, in which the mean for the cloze test written with the lowest of the high frequency patterns did not differ significantly from the mean of the cloze test written with the highest of the low frequency patterns.

4. The correlation coefficient between the cloze comprehension scores tabulated by the exact deletion method and the frequency of occurrence of patterns of language structure used in the cloze tests differs significantly from the correlation coefficient calculated between the comprehension scores tabulated by the synonym count method and the frequency of occurrence of patterns of language structure. Thus, it was further concluded that in the exact deletion scoring method the frequency of occurrence of patterns of language structure accounts for a significantly larger per cent of the variance in the cloze comprehension scores than in the cloze comprehension scores tabulated by the synonym count scoring method.

## 4. Experimental Applications of Cloze Tests

John R. Bormuth

Cloze tests, like some other new and useful research tools, were used by researchers before enough was known about them to be sure that they would yield reliable results. The present study attempted to determine the reliability of cloze tests when they are used for measuring the comprehension difficulties of passages. The questions investigated were the following: (1) Do the different cloze test forms that can be made from the same passage differ in difficulty? (2) If they do differ, by how much? (3) How are these differences affected by the number of items included in the test forms?

Cloze tests are made by replacing every fifth word in a passage with an underlined blank of a standard length. Subjects taking the tests are instructed to figure out what word was taken out of each space and to write it in. The tests are usually given without letting the subjects read the passages from which they are made. Five different test forms can be made from a single passage by beginning the deletion process with successive words. For example, in one form words 1, 6, 11, etc. and in another form words 2, 7, 12, etc. would be deleted. The difficulty of a test form is found by converting the scores of subjects to percentages and finding the mean. Passage difficulty, as distinguished from test form difficulty, is found by making all five of the forms over a passage, administering a different form to each of five matched groups, finding the difficulty of each and then averaging the difficulties of the five forms.

When comparing the difficulties of passages, a researcher commonly uses only a single test form over each of his passages. This necessarily forces him to assume that he will obtain the same difficulty value from the form that he actually made as he would have obtained from any of the five forms that he could have made. The problem with this assumption is that words differ greatly in difficulty when they appear as cloze test items. Since cloze test forms are actually samples of the words in a passage, the difficulty of a form will almost always vary to some extent from the difficulty of the passage from which it was made and from the difficulties of the other test forms over that passage. Consequently, the researcher has the problem of deciding whether test forms over different passages differ because of an actual difference in the difficulties of the passages or because of the particular cloze test forms that he happened to have made over each passage.

Little is known of how the difficulties of forms made from the same passage differ, and virtually nothing is known of how large these differences can be expected to be at any given test length. Taylor[1] made five 35-item test forms from the same passage, administered a different one to each of five randomly selected groups, and, starting with the first item in each form, computed a cumulative mean at each item. He found that when the forms included few items the means fluctuated erratically and differed widely among forms. As more items were included in the forms, their means stabilized and tended to converge on each other. However, a significant difference was found among the means when all 35 items had been included in the scores.

### Procedures

Five cloze test forms of 50 items each

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[1] Wilson L. Taylor. *Application of 'Cloze' and Entropy Measures to the Study of Contextual Constraint in Samples of Continuous Prose.* Doctor's thesis. Urbana: University of Illinois, 1954.

were made from each of 20 passages. The deletion process was begun with the first word in the second sentence of each passage. In making the different forms the deletion process was begun with successive words so that every word in a 250-word section of the passage appeared as a deletion item in one of the forms.

Of the 20 passages used, four were selected from each of the subject matter areas of literature, history, geography, biological science, and physical science. The books from which they were selected were literary works and textbooks. Within each subject matter area the passages ranged in Dale-Chall[2] readability from about the 4.0 to 8.0 grade levels of difficulty.

Subjects to whom the tests were given constituted the entire enrollments of grades 4 through 8 in a small city. They were first given the Stanford Reading Achievement Test and the total scores were used for dividing them into five groups having matched means and distributions. There were 139 subjects in each group. A different form of the cloze test made from each passage was administered to each of the five groups. Every subject in every group took one of the forms over each of the 20 passages.

Responses to the items were counted correct when they were the same as the deleted words. Phonetic spellings were accepted, if they were otherwise correct.

The test forms were divided after every fifth item to form ten test lengths. As the tests were scored a cumulative score was recorded after every fifth item in the test. These scores were then converted to percentage scores and used to compute a test form difficulty at each test length. The test form difficulties were, in turn, used to compute a passage difficulty at each test length.

The differences among the mean scores on the five different test forms over the same passage were tested for significance using a one by five analysis of variance design. This analysis was performed separately for each test length within each passage.

The range was found between the highest and lowest test form mean at each of the test lengths within each passage. The mean, standard deviation and range of these values were found for these values when they were grouped by test length.

The variability of the test form means around their respective passage means was calculated for each test length. For convenience this statistic was labeled *standard test form error.* It was calculated by subtracting each test form difficulty from the difficulty of the passage at that test length. These differences were grouped according to test length and pooled across tests. They were then squared, summed, divided by the number of deviation values in the calculation, and the square root extracted.

### Results

Table 1 summarizes the results obtained from analyzing the variance of the scores on the test forms over the same passage. They are grouped in the table according to the test lengths at which each analysis was performed.

This analysis showed that there were significant differences among the means

TABLE 1

NUMBER OF DIFFERENCES AMONG EACH OF THE SETS OF MEANS OBTAINED FROM THE FIVE CLOZE TEST FORMS MADE FROM THE SAME PASSAGE THAT REACHED VARIOUS LEVELS OF SIGNIFICANCE AT VARIOUS TEST LENGTHS (Number of degrees of freedom 4/690)

| Levels of Significance | Number of Items Included in Each Test Form | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| .01 | 17 | 14 | 10 | 11 | 9 | 6 | 4 | 5 | 3 | 5 |
| .05 | 3 | 4 | 7 | 4 | 7 | 5 | 7 | 6 | 9 | 8 |
| Not Significant | 0 | 2 | 3 | 5 | 4 | 9 | 9 | 9 | 8 | 7 |
| Number of Passages | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

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[2] Edgar Dale and Jeanne S. Chall, "A Formula for Predicting Readability," *Educational Research Bulletin* 27:11-20, 28; January 1948.

of the tests at all of the test lengths examined in this study. It also showed that, as more items were included in the tests, there was a steady, if somewhat irregular, decrease in the number of sets of means that differed significantly at any of the confidence levels shown. This decrease was most rapid among tests containing the fewest items and became less sharply defined as test lengths were increased.

Table 2 summarizes the results when the range was found between the highest and lowest test form means over each passage and at each test length. In the table these are expressed as percentages of correct responses and are grouped by the lengths of the tests upon which they were calculated.

TABLE 2

SIZES OF THE RANGES BETWEEN THE HIGHEST AND LOWEST TEST FORM MEANS IN EACH SET OF FIVE TEST FORMS MADE OVER THE SAME PASSAGE, CALCULATED AT EACH TEST LENGTH

| Statistic | Number of Items Included in Each Test Form | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| Mean | 23.6 | 14.4 | 10.9 | 10.0 | 8.9 | 7.8 | 7.3 | 7.4 | 7.0 | 6.8 |
| Standard Deviation | 7.7 | 4.9 | 4.0 | 3.9 | 3.4 | 3.7 | 3.0 | 2.2 | 2.4 | 2.1 |
| Smallest Range | 10.6 | 7.8 | 3.5 | 4.7 | 3.2 | 3.0 | 3.2 | 4.3 | 3.0 | 3.0 |
| Greatest Range | 37.6 | 26.4 | 18.7 | 15.3 | 17.0 | 17.6 | 15.9 | 13.2 | 13.5 | 11.9 |

This table shows what one would have been lead to expect from an examination of Table 1, namely that the differences among test forms that are made from the same passage tend to diminish as more items are included in the tests and that the rate of diminuation decreases as the number of items included in the test forms becomes larger. It is worth noting that, even when the test forms contained 50 items, large ranges continued to appear. No set of means at this test length had a range of less than three points and one showed a range of almost twelve points. Approximately two-thirds of these sets of means at this test length had ranges of between 4.7 and 8.9 percentage points.

The *standard test form errors* are shown in Table 3. These are the standard deviations calculated on the deviation of the mean of each test form from the passage difficulty at that test length. In the table they are shown for each of the test lengths studied.

TABLE 3

STANDARD TEST FORM ERRORS CALCULATED FOR EACH TEST LENGTH FROM THE DEVIATIONS OF THE TEST FORM MEANS AROUND THEIR RESPECTIVE PASSAGE MEANS

| Number of Items Included in Each Test Form | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 12.7 | 8.2 | 6.4 | 5.7 | 5.2 | 4.6 | 4.2 | 4.1 | 4.0 | 3.8 |

The *standard test form errors* followed the same patterns that were observed in the other two analyses. That is, the means of the test forms made from the same passage showed less variability around their own passage mean as the number of items included in the tests became larger and this reduction in variability was greatest on the shorter test lengths and diminished as the numbers of items in the test forms were increased.

## Discussion

These results suggest that test forms made from the same passage, if made sufficiently long, might come to yield nearly identical mean difficulties. However, the tests would have to be very long, perhaps too long to be of practical value for designing research studies. Consequently, it would be wise for researchers to use more than one cloze test form over the passages that they are studying, if it is important that they obtain a precise determination of the difficulty of the passage.

But this must not be construed as meaning that a researcher cannot use only a single test form over each of the passages that he wants to study. It merely means that he must now take into account another source of error in his observations. He must now consider both the probability that the test forms that he used were drawn from passages that did not differ in difficulty and the probability that he would have obtained the same results had he drawn other samples of subjects.

The *standard test form error* was calculated for the purpose of aiding the researcher in determining whether test forms that he used were drawn from passages of equal difficulties. The *standard test form error* is interpreted here as the standard error with which a mean on a single cloze test form of a given length approximates the mean difficulty of the passage from which it was made where passage difficulty is determined by averaging the means of all five of the test forms over that passage at that test length.

### Summary and Conclusions

The purpose of this study was to find out (1) whether the five different forms of a cloze test that can be made from the same passage differed in difficulty, (2) if so, by how much, and (3) whether these differences were affected by the number of items included in the test forms. Five cloze test forms were made over each of 20 passages. A different form was given to each of five groups of 139 students each who were enrolled in grades 4 through 8. The groups were matched with respect to means and distributions of scores on a standardized test of reading ability. The cloze tests were divided after every fifth test item forming tests of ten different lengths. A cumulative score was noted for each subject at each test length.

The conclusions reached in this study are as follows:

1. The means on different cloze test forms that are made from the same passage differ significantly for tests of 50 items or less. There were significant differences among over half of the 20 sets of test forms used in this study.
2. The differences in difficulty among test forms made from the same passage tend to diminish as more items are included in the test forms.
3. The practice of using only a single cloze test form over each of the passages that a researcher is studying should probably be avoided where precise determinations of passage difficulties are needed and especially when the passages are short. In such experiments all five forms should be used.
4. When single forms are used in experiments it is necessary to show that the observed differences are sufficiently large to assure that they did not arise solely because of the test forms that the experimenter happened to make over his passages. The *standard test form error* was calculated to aid in determining this.

## 5. Are Normative Oral Reading Error Profiles Necessary?

GABRIEL M. DELLA-PIANA
WAYNE R. HERLIN

IN A previous year (*1*) one of the writers took a position favoring Monroe's norm-profile approach to analysis of oral reading errors as opposed to Durrell's gross-error check list approach, but at the same time called for some specific kinds of validational research. The present paper reports some preliminary data relevant to a choice between the use of oral reading error profiles based on some kind of norms as opposed to those based on a gross error count or check list. Specifically, we report here an exploratory study of the question: Do raw score error ranks give us a different oral reading error profile than reading grade norm error ranks?

### Subjects

In a related study (*2*) one of the writers utilized a sample of half of all the third and fourth grade classes in four schools resulting in an N of 243 pupils.

From that sample we selected those retarded readers whose reading achievement was one year or more below their expected reading level. This gave us an N of 43 pupils for the present study. The median IQ of the group was 109. Median average reading achievement was 3.7 for third graders and 4.9 for fourth graders. Only three of the forty-three pupils were a year behind their grade placement in reading achievement although all 43 were a year or more behind their grade expectancy. For purposes of the above selection expected reading level was determined by the grade expectancy norms on the California Test of Mental Maturity, Short Form, 1963, Experimental Edition. Reading achievement level was based on two averages: (a) California Reading Test and the Monroe battery of Gray's Oral Reading Paragraphs, Iota Word Test, and Monroe Word Discrimination, and (b) California Reading Test and the Durrell Oral Reading Paragraphs, Word Recognition, and Word Analysis Tests.

### Definition of Terms

1. Oral Reading Error Types. Vowels (V), Consonants (C), Reversals (R), Addition of Sounds (As), Omission of Sounds (Os), Substitutions (S), Repetitions (Rp), Addition of Words (Aw), Omission of Words (Ow), and Words Refused (Rf) are defined following Monroe's classification. Scoring had substantial objectivity. On a group of 30 randomly selected cases we obtained high interscorer agreement with product-moment correlations of .80 to 1.00 for each of the error types (median of .96) on both the Durrell and Monroe tests.

2. Raw Error Score. Two such scores were obtained for each error type on each student. One was errors per 500 words read in the Monroe battery (MON/500) and the other was errors per 500 words read in the Durrell battery (DUR/500).

3. Normative Error Score. Two normative error scores were obtained for each error type on each pupil. These are standard scores, z-scores. One was based on the Monroe test (MON-z) and the other was based on the Durrell battery (DUR-z). Essentially, this score gave a pupil's position (z-score) on each error type compared with the average number of errors of that type made by pupils with his average reading level in the total sample of 243 students from which our sample was drawn.

### Reliability for Error Scores

As indicated above, scoring was very reliable (objective) as indicated by excellent agreement between independent trained scorers. An immediate retest reliability was not obtained because the procedure for test administration required prompting students on difficult words. A more stringent test of reliability is the correlation between a pupil's raw score error ranks on the Durrell (DUR/500) and his error ranks on the Monroe (MON/500). These correlations are represented by the column "1 vs. 3" in Table 1 and give evidence of considerable agreement between raw score error ranks with different samples of reading material.

### Results

The results are all based on four scores for each student on each of the ten oral reading error types. The scores (defined above) are: MON/500, MON/z, DUR/500, and DUR/z. For each score, the ten error types were ranked according to frequency. Then the ranks were correlated using Rho, the Spearman rank order correlation. To get a picture of what is being correlated, study Figure 1 and Figure 2

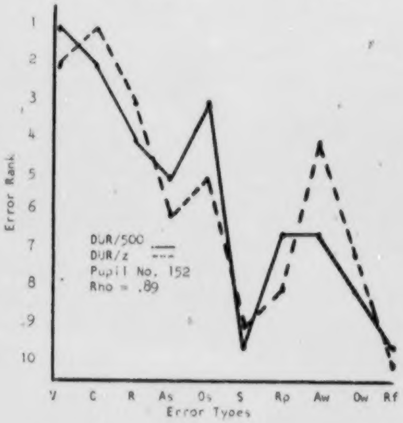

FIGURE 1

A PUPIL WITH A HIGH CORRELATION BETWEEN RAW ERROR AND NORMATIVE ERROR RANKS which give examples of a high and low correlation respectively.

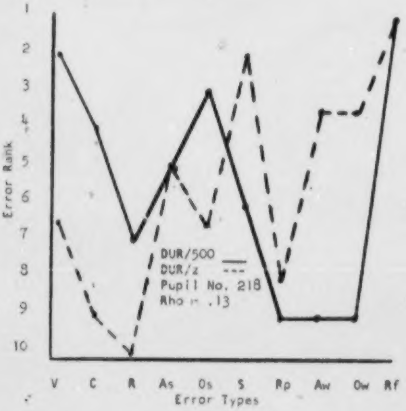

FIGURE 2

A PUPIL WITH A LOW CORRELATION BETWEEN RAW ERROR AND NORMATIVE ERROR RANKS

A summary of the frequency of correlations of different magnitudes is represented in Table 1. These correlations show that for most of our 43 pupils there is a substantial degree of agreement between the ranking of their oral reading errors based on raw scores (MON/500 or DUR/500) and their ranking based on normative comparisons with children of the same average reading level (MON/z or DUR/z). *In other words for most of these pupils the norms give no different information on reading error rank than do raw error scores.*

However, we pulled out for special study the eleven students with lowest correlations beteen raw score and normative error ranks (Rho's ranging from —.2 to +.3) and discovered that the low Rho's occurred primarily because of large rank order discrepancies among the following kinds of errors: vowels, substitutions, addition of words and omission of words. Case No. 218 represented in Figure 2 is illustrative of this pattern.

## Conclusions

1. Although for most cases error ranks are much the same whether based on raw scores or norms, some pupils show wide rank order differences among vowels, substitutions, additions of words, and omissions of words. The fact that these large differences occur for some pupils leads us to defend the use of norms.

2. The question of whether treatment procedures derived in part from the normative profile lead to greater gains in

TABLE 1

FREQUENCY DITRIBUTION OF RANK ORDER CORRELATIONS BETWEEN RAW SCORE ERROR RANKS AND NORMATIVE ERROR RANKS

| Classes | *1 vs. 2 | 3 vs. 4 | 1 vs. 3 | 2 vs. 4 | Totals |
|---|---|---|---|---|---|
| .90+ | 4 | 1 | 3 | | 8 |
| .80 to .89 | 11 | 8 | 11 | | 30 |
| .70 to .79 | 3 | 1 | 9 | 2 | 15 |
| .60 to .69 | 1 | 9 | 9 | 6 | 25 |
| .50 to .59 | 7 | 4 | 4 | 4 | 19 |
| .40 to .49 | 2 | 9 | 1 | 5 | 17 |
| .30 to .39 | 7 | 1 | 3 | 4 | 15 |
| .20 to .29 | 3 | 1 | 3 | 2 | 9 |
| .10 to .19 | 1 | 6 | | 6 | 13 |
| .00 to .09 | 1 | 1 | | 6 | 8 |
| —.10 to —.01 | 1 | 1 | | 3 | 5 |
| —.20 to —.11 | 2 | 1 | | 2 | 5 |
| —.30 to —.19 | | | | 1 | 1 |
| —.40 to —.29 | | | | 1 | 1 |
| —.50 to —.39 | | | | 1 | 1 |
| Totals | 43 | 43 | 43 | 43 | 172 |

*1 = MON/500 Monroe oral reading raw error score per 500 words read.
2 = MON/z Monroe oral reading grade norm error score.
3 = DUR/500 Durrell oral reading raw error score per 500 words read.
4 = DUR/z Durrell oral reading grade norm error score.

reading achievement than treatment based on a check list of errors or a raw score profile is, of course, one that can be answered only by appropriate further experiments. Such experiments are a rarity.

3. Finally, the bold experimentation on new approaches to the teaching of reading, some of which radically change the sequence and content of instructional materials may require the development of special curricular norms for diagnostic reading tests or even lessen the use of diagnostic reading tests and lead to more tests which are part of a specific course of study. This seems a possibility in spite of the fairly high agreement on error profiles in two different tests used in our study.

### REFERENCES

1 Della-Piana, Gabriel. "Analysis of Oral Reading Errors: Standardization, Norms, and Validity," *The Reading Teacher*, January, 1962, pp. 254-257.

2. Herlin, Wayne R. *A Comparison of Oral Reading Errors on the Monroe Diagnostic Reading Examination and the Durrell Analysis of Reading Difficulty*. Unpublished doctoral dissertation. Department of Educational Psychology, University of Utah, August, 1963.

## 6. Word Recognition Practice: Basal vs. Phonics Programs

GEORGE E. MASON

THE TEACHER'S manuals and workbooks for eight leading series of basal readers and seven well-known sets of phonics-teaching publications were studied in order to compare suggested practices. The level at which each understanding of phonics, structural analysis, or dictionary usage was first introduced, as well as the amount of practice suggested, was recorded. The information was then tabled or depicted in figures for comparisons. The original plan was to compare basal reading series, to compare phonics materials, and finally compare the two types.

### Findings

The differences in level of introduction and sequence of introduction of skills and understandings were more numerous than anticipated. The major findings of the study were the extensive *differences among programs of either type*. Few generalizations could be drawn. Therefore comparison of the *two types* of programs was limited to a very few areas.

The following list incorporates those generalizations possible:

(1) Some phonics programs were more similar to basal reading programs than they were to other phonics programs, and vice versa.

(2) Basal reading programs were more apt to teach discrimination of rhyming and alliteration prior to introduction of sound-letter relationships than were phonics materials.

(3) Consonant letter-sound relationships were more apt to be taught first than were vowel letter-sound relationships in all the programs studied. However, in many phonics books isolated letters and sounds are presented, whereas in basal reading series the sounds are usually presented within spoken words and the letters within printed words.

(4) Initial consonant substitution and syllabic division were the only techniques suggested for teaching by *every* basal reading series. Phonics programs teach most commonly (a) the finding of letters (in printed words) representing dictated sounds, (b) writing letters representing dictated sounds, and (c) pronouncing words by "sounding-out" their letters.

(5) The greatest agreement among basal reading series was on the structural skills and understandings. All suggested teaching inflectional endings, compound words, contractions, prefixes, roots, and root changes in derived forms. Phonics programs were completely agreed only on the teaching of prefixes and suffixes (but not on the same ones).

(6) Every basal reading series included a program for developing dictionary skills. No phonics program provided as many activities as any single basal reading series for dictionary skill development.

(7) The phonics programs suggested, in general, more letter-naming. They directed attention to more letters and to more specific sounds than did basal reading programs. The latter presented more total printed and spoken words for practice.

(8) In basal reading series, calling attention to a word's meaning is done by pointing out its use in context, or by providing an incomplete sentence into which it may be inserted. In phonics programs, the child is usually asked to say or write the word in a sentence.

### Summary

Differences exist in levels at which skills and understandings are introduced in basal programs, and in sequences of introduction and extent to which practice is suggested. The same differences are evident among phonics and manuals. Programs of either type are different in so many ways that the isolation of the differences in instruction which might be responsible for the differences in achievement seems nearly impossible.

## 7. The Development and Validation of the Standard Reading Inventory for the Individual Appraisal of Reading Performance in Grades One Through Six

ROBERT A. MCCRACKEN

THE PURPOSE of this research was to develop a valid and reliable individual reading test for measuring the reading achievement of elementary school children.

### Description of the Standard Reading Inventory

The test is named the Standard Reading Inventory. The Standard Reading Inventory provides measures of a child's independent reading level, his instructional reading levels, and his frustration level in reading. The reading levels are given as basal reading book levels. There are two equivalent forms.

Each form of the Standard Reading Inventory has eleven stories for oral reading, eight stories for silent reading, and eleven word lists for measuring word pronouncing ability in isolation. The stories vary in length from 47 words to 151 words. Each word list has twenty-five words except the pre-primer which has fifteen. The stories and word lists are at eleven basal reading book levels, pre-primer, primer, 1-2, 2-1, 2-2, 3-1, 3-2, 4, 5, 6, and 7.

A child's reading levels are determined by an evaluation of four areas of reading achievement.

1. RECOGNITION VOCABULARY
   a. vocabulary in isolation
   b. vocabulary in context (levels pre-primer through 3-2)
2. ORAL ERRORS
   a. word recognition errors in oral reading
   b. total errors in oral reading
3. COMPREHENSION
   a. recall after oral reading
   b. recall after silent reading
   c. interpretation and word meaning in context after oral reading
   d. interpretation and word meaning in context after silent reading
4. SPEED
   a. oral speed
   b. silent speed
   c. oral and silent speed compared

### Three Reading Levels Measured by the S. R. I.[1]

The independent reading level is the highest book level which a child has mastered; he is independent of instructional needs. This has been called the *homework level* of reading, the level at which a child can independently read for information and pleasure.

The instructional reading level is the book level (usually levels) from which a child needs instruction and from which a child benefits by having instruction. The instructional maximum is the highest book level at which the child can profit from instruction and the instructional minimum is the lowest book level at which the child exhibits a need for instruction.

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[1] The standards used in the *Standard Reading Inventory* are based upon the criteria recommended by Emmett Betts in *Foundations of Reading Instruction*, American Book Company, 1946. This is the earliest published definitive list of criteria for determining independent, instructional, and frustration levels of reading which the writer has found. These standards have been quoted or paraphrased in many professional reading texts since that time.

Frustration reading level is the lowest book level at which a child manifests any symptom of frustration. Frustration level means that the book level is so difficult that a child cannot learn to read from it.

**Evaluating the Child's Reading Levels**

The child's reading levels are evaluated by the use of a scoring sheet (see Figure 1 for a partial reproduction). All numbers on the general scoring sheet are raw scores.

A child must rate as independent in all sub-tests at a given book level in both oral and silent reading to be rated as independent.

A single rating under frustration on one sub-test makes it mandatory that the level be rated as frustration level. A simultaneous weakness in two or more of the four areas measured (recognition vocabulary, oral errors, comprehension, speed) at a single book level or a persistent weakness in one area at consecutive grade levels is rated as frustration. Weakness is defined as a score falling into the questionable side of the instructional level. The total area, not just one of the sub-tests of the area, must rate as weak.

The instructional level or levels fall between the independent levels and the frustration level. If a child scores better in a sub-test when reading at a higher book level than at a lower book level, the lower book level is ignored in the evaluation, and the higher level accepted as valid for both levels. For example, a recall comprehension score of 8 after silent reading at the 4th reader level and a comprehension score of 9 after silent reading at the 5th reader level should both be considered as rating independent level.

Figure 1

GENERAL SCORING SHEET — STANDARD READING INVENTORY

| | | | instructional | | |
|---|---|---|---|---|---|
| | | frustration | questionable | definite | independent |
| PRE-PRIMER | VOCABULARY context | | 8 or less | 9 — 21 | 22 - 23 - 24 |
| | isolation | | 5 or less | 6 — 13 | 14 - 15 |
| | ERRORS word recognition | 7 or more | 6 5 4 | 3 2 | 1 - 0 |
| | total | 11 or more | 10 to 5 | 4 3 2 | 1 - 0 |
| | COMPREHENSION oral | 0 or 1 | 2 | 3 4 | 5 |
| | SPEED oral (seconds) | | 60 or more | 59 — 48 | 47 or less |
| PRIMER 1-1 | VOCABULARY context | | 5 or less | 6 7 8 | 9 - 10 |
| | isolation | | 11 or less | 12 — 22 | 23 - 24 - 25 |
| | ERRORS word recognition | 7 or more | 6 5 4 | 3 2 | 1 - 0 |
| | total | 7 or more | 6 5 | 4 3 | 2 - 1 - 0 |
| | COMPREHENSION oral recall | 0 to 5 | 6 | 7 8 | 9 - 10 |
| | silent recall | 0 to 5 | 6 | 7 8 | 9 - 10 |
| | total interpretation | | 0 1 2 | 3 4 | 5 - 6 |
| | SPEED oral (seconds) | | 65 or more | 64 — 49 | 48 or less |
| | silent (seconds) | | 65 or more | 64 — 49 | 48 or less |

**Validity**

*Content Validity*

The content of the Standard Reading Inventory is based upon three basal reading series, Allyn and Bacon, Inc.,[2] Ginn and Company,[3] and Scott-Foresman and Company.[4]

Content validity was obtained by:

1. Vocabulary control—
   a. When possible the words used for the word lists and the vocabulary in context are words introduced in all three basal reading series at the same level.
   b. Except for story titles no words are used in the stories for primer through 3-2 levels which have not been introduced in two of the three basal reading series at or before the level of the story. The story titles are pronounced for the child before he reads.
2. Sentence length, content, and general style are based upon the three basal readers.

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[2] William D. Sheldon and others. *The Sheldon Basic Readers, Allyn and Bacon, Inc.*, 1957-58.

[3] David Russell and others, *The Ginn Basic Readers*, Ginn and Company, 1960-61.

[4] William S. Gray and others, *Curriculum Foundation Series*, Scott-Foresman and Company, 1948 and 1952.

3. The Spache Readability Formula[5] was used to analyze the basal readers and to act as a guide in writing the stories for primer through 3-2 levels.
4. The Dale-Chall Formula for Predicting Readability[6] was used to act as a guide in writing the stories for levels four through seven.

This content validity was corroborated by testing 664 children in grades 1-6 using the stories or the word lists. The number of oral reading errors each pupil made as he read each story was used as the criterion of story difficulty. The number of words known in pronouncing the words on a word list was used as the criterion of word list difficulty. It was assumed that a child would make more oral reading errors in reading a fifth reader story than in reading a fourth reader story, for example. It was assumed that a child would know more words on the 3-2 reader list than he would on the fourth reader list. It was assumed that a child would make the same number of oral reading errors when reading two fourth reader stories or would know the same number of words on each list when reading two word lists at the 3-2 level.

The results were tabulated and compared. The results comparing stories or word lists of the same book level were expected not to differ significantly. The results comparing stories or word lists of succeeding levels of difficulty were expected to differ significantly. A critical ratio test for mean differences between two measures of the same individual was used.[7]
The 0.01 level of significance ($p < 0.01$) was considered as critical.

The preliminary stories were read individually in sets by groups of 12 to 24 children. The order in which the stories were read was determined by randomly assigning the stories to sequence-blocks. Sequence-blocks had been determined so that each story was read first, second, third, etc., an equal number of times and so that each story was preceded and followed by each other story an equal number of times. The validation testing began at the pre-primer level and preceded upward one grade level at a time.

For example, eighteen children read six stories at the fourth reader level and one story already validated at the 3-2 reader level. The number of oral reading errors made by each child was compared for each story. Twenty-one critical ratio comparisons were made in this example. The four fourth reader stories which seemed the most alike were selected for inclusion in the S. R. I. provided they were significantly harder than the 3-2 level story. Oral reading times were compared in making the selection if more than four of the stories seemed equivalent. The fourth reader story on which the children had made the most oral reading errors was administered with the fifth reader story set.

The level of significance for the stories and word lists included in the S. R. I. corroborated the content validity. The least desirable level of significance found in comparing stories or word lists at the same book level was 0.12. Most of the levels of significance were 0.25 or better. All of the levels of significance exceeded 0.01 when comparing materials on succeeding levels of difficulty, and most were at or beyond the 0.0001 level. This indicates that the possibility of an alpha or beta type error was virtually eliminated.

Further corroboration of the content validity was secured by expert ratings. Thirty experts in reading were asked to evaluate subjectively the basal book level of each story. Form A was sent to fifteen experts and form B was sent to fifteen other experts. Replies were received from twenty-five experts. Twelve rated form A; eleven rated form B; and two declined to participate.

Rank correlations were computed using the formula[8]

$$R = 1 - \frac{6Ed^2}{N(N^2-1)}$$

R for form A experts' ratings and S. R. I. book levels was 0.99, and for form B was

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[5] George Spache, *Good Reading for Poor Readers*, The Garrard Press Publishers, 1958 and 1961.

[6] Edgar Dale and Jeanne Chall, "A formula for predicting readability," *Educational Research Bulletin*, 27:11-20, 28, 37-54, Jan. 21 and Feb. 18, 1948.

[7] Helen M. Walker, *Elementary Stdtistical Methods*, Henry Holt and Company, Inc., 1943. pp. 293.
Quinn McNemar, *Psychological Statistics*, John Wiley and Sons, Inc., 1949. pp. 225-226.
The general formula is: $CR = \frac{MDx - MDy}{SMDx - SMDy}$.

[8] Helen M. Walker. *Elementary Statistical Methods*, Henry Holt and Company, 1943, pp. 75-78.

0.99. In the experts' ratings there tended to be a range of about four book levels for each story, except at the pre-primer level which was rated as pre-primer in twenty-one of the twenty-three ratings.

### Reliability

Reliability was demonstrated by having two examiners administer alternate forms of the Standard Reading Inventory to 60 elementary school children, 30 boys and 30 girls, divided equally among grades 1 through 6. The subjects were selected randomly from classes within the elementary schools of the Fulton (New York) Consolidated Schools. Five boys and five girls were tested at each grade level. Fifteen boys and fifteen girls had Form A administered to them first and Form B second, and conversely. Five subjects at each grade level had Form A administered first and Form B second, and conversely. No more than five children were chosen from any one class except in first grade. The first test given to a child was administered by one examiner and the second test was administered by the other examiner. Each examiner administered an equal number of tests first and second and each administered an equal number of Form A and Form B. The children were tested with one form during one week and with the second form the following week, except when absence made this impossible. The greatest time lapse between the administration of Form A and Form B for any one child was two weeks.

The two forms were administered independently by the examiners. Each examiner knew only that the test being administered was the first or second testing. Twelve Pearson product-moment correlations were computed using the total results. See tables I & II. The highest correlation was 0.99, the lowest 0.68 and the median 0.91. All twelve correlations are significantly different from zero ($p < .001$). Seventy-eight correlations were computed for the subtest scores. See table III.* Sixty of these are significantly different from zero at the .01 level ($p < 0.01$), six were significantly different from zero at the 0.05 level of confidence ($p < 0.05$), and twelve are not significantly different from zero ($p > 0.05$). The median subtest correlation was 0.71. None of the correlations was corrected for attenuation.

TABLE I

CORRELATIONS BETWEEN FORM A AND FORM B READING LEVELS FOR THE S.R.I. FOR 60 CHILDREN IN GRADES 1-6

| Reading level | r* |
|---|---|
| Frustration | 0.91 |
| Instructional Maximum | 0.91 |
| Instructional Minimum | 0.91 |
| Independent | 0.86 |

*All correlations significantly different from zero ($p \leqq 0.001$).

TABLE II

CORRELATIONS BETWEEN THE TOTAL RAW SCORE RESULTS ON FORMS A AND B OF THE S.R.I. FOR EIGHT AREAS OF READING ACHIEVEMENT FOR CHILDREN IN GRADES 1-6

| Area of achievement | r* | N |
|---|---|---|
| Oral speed | 0.95 | 60 |
| Oral comprehension | 0.97 | 60 |
| Total oral errors | 0.80 | 60 |
| Word recognition errors | 0.68 | 60 |
| Silent speed | 0.91 | 49 |
| Silent comprehension | 0.84 | 49 |
| Vocabulary in isolation | 0.99 | 60 |
| Vocabulary in context | 0.98 | 56 |

*All correlations significantly different from zero ($p \leqq 0.001$).

## 8. Substrata-Factor Theory of Reading: Grade and Sex Differences in Reading at the Elementary School Level[1]

HARRY SINGER

THE SUBSTRATA-FACTOR theory of reading[2,3,4] asserts that general reading is

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*Table III appears on page 314.

[1] The Research reported herein was supported through the Cooperative Research Program of the Office of Education, U. S. Department of Health, Education, and Welfare.

[2] Jack A. Holmes. *The Substrata-Factor Theory of Reading.* Berkeley: California Book, 1953. (Out of print)

[3] Harry Singer. *Conceptual Ability in the Substrata-Factor Theory of Reading.* Unpublished doctoral dissertation. University of California, Berkeley, 1960.

[4] Jack A. Holmes and Harry Singer. *Substrata-Factor Differences Underlying Reading Ability in Known Groups.* Final Report Covering Contracts No. 438, SAE-8176, and No. 538A, SAE-8660, U. S. Office of Education, 1961.

## TABLE III

### CORRELATIONS BETWEEN FORMS A AND B RAW SCORES OF THE S.R.I. FOR EACH OF THE EIGHT SUBTESTS OF READING ACHIEVEMENT MEASURED AT EACH BOOK LEVEL

(Number of Pupils Given in Parentheses)

| Area of reading achievement | pre-primer | primer | 1-2 | 2-1 | 2-2 | 3-1 | 3-2 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Oral speed | (22)<br>0.96** | (18)<br>0.97** | (15)<br>0.75** | (29)<br>0.95** | (29)<br>0.93** | (32)<br>0.95** | (34)<br>0.90** | (32)<br>0.75** | (23)<br>0.70** | (11)<br>0.80** | (6)<br>0.73* |
| Oral comprehension | (22)<br>0.50** | (19)<br>0.62** | (15)<br>0.04 | (27)<br>0.54** | (28)<br>0.44** | (32)<br>0.34* | (34)<br>0.29* | (33)<br>0.56** | (23)<br>0.17 | (11)<br>0.47 | (6)<br>0.24 |
| Total errors | (22)<br>0.80** | (19)<br>0.92** | (15)<br>0.13 | (29)<br>0.47** | (29)<br>0.59** | (32)<br>0.62** | (34)<br>0.56** | (34)<br>0.61** | (23)<br>0.81** | (11)<br>0.72** | (6)<br>0.90** |
| Word recognition errors | (22)<br>0.77** | (19)<br>0.93** | (15)<br>0.25 | (29)<br>0.70** | (29)<br>0.54** | (32)<br>0.68** | (34)<br>0.74** | (34)<br>0.66** | (23)<br>0.64** | (11)<br>0.62** | (6)<br>0.86** |
| Silent speed | | (12)<br>0.94** | (24)<br>0.84** | | (31)<br>0.88** | | (32)<br>0.90** | (27)<br>0.91** | (17)<br>0.61** | (9)<br>0.96** | (4)<br>0.71 |
| Silent comprehension | | (12)<br>0.47* | (24)<br>0.24* | | (31)<br>0.29* | | (33)<br>0.37** | (27)<br>0.47** | (18)<br>0.30 | (9)<br>0.27 | (4)<br>—0.77 |
| Vocabulary in isolation | (14)<br>0.35 | (16)<br>0.97** | (13)<br>0.87** | (17)<br>0.77** | (20)<br>0.84** | (22)<br>0.86** | (28)<br>0.91** | (35)<br>0.91** | (33)<br>0.91** | (31)<br>0.87** | (20)<br>0.78** |
| Vocabulary in context | (22)<br>0.61** | (19)<br>0.91** | (15)<br>—0.05 | (29)<br>0.77** | (29)<br>0.70** | (31)<br>0.73** | (34)<br>0.62** | | | | |

**Significantly different from zero at or beyond the 0.01 level ($p \leqq 0.01$).

*Significantly different from zero at the 0.05 level ($p \leqq 0.05$).

an audio-visual processing skill of symbolic reasoning. This ability divides into two major interrelated components: speed and power of reading. Underlying and supporting each component is a complexly interwoven hierarchy of elements and processes. The elements are mobilized into substrata-factors and organized into working-systems that function at various substrata levels according to the momentary purposes of the reader and the demands of the material. Hence, as the individual reads he constantly organizes and reorganizes the elements into substrata-factors at different substrata levels. At one time, he may organize these elements into a substrata-factor system for the purpose of conceptualizing, relating ideas, or reasoning-in-context; at another moment, call upon those elements that will enable him to understand word-meaning-in-context; and at the next instant, reorganize his working-system and mobilize auditory, visual, and perhaps spelling subskills and processes for the purpose of attaining word-recognition-in-context. Throughout his reading the individual not only shifts his working-system and mobilizes auditory, visual, and of his general organization for power of reading, but he also switches from power to speed of reading; as he does, he changes from a working-system that enables him to read difficult materials somewhat analytically and mobilizes into another working-system those subskills that permit him to read relatively easy material at a faster rate.

In general, as the individual matures in reading ability, not only do his subskills improve in variety and magnitude, but they also become organized into subsystems and sequences of subsystems which may be broadly categorized as word-recognition-substrata, word meaning substrata, and reasoning-in-context-substrata. Moreover, as a result of instruction and practice, an individual learns to organize a subsystem in which the factors psychosynchromesh because all the related factors have been mobilized in proper order and magnitude. The reader thus gains a maximum of interfacilitation in his mobilized working system. The individual can then concentrate more of his mental energy upon ideas derived from the printed page. Gradually the individual not only improves in power and speed of reading, but also in the organizational process by which he attains these products of his general working system. At maturity, therefore, his working-systems, in general, function fluently for symbolic reasoning from printed symbols.

Many kinds of working-systems for power and speed of reading result from individual differences in (a) rate of maturation and degree of capacities, (b) method, sequence, and degree of learning, (c) background experiences and range of resulting ideas, and (d) temperament and motivation, as well as values. These differences are manifested in the kinds and relative amounts of subskills which each individual mobilizes into a working-system to solve a particular task. Hence the degree of achievement attained and the processes underlying the solution of a task may vary from person to person. However, there is more than one route to the goal of success in reading; that is, two individuals may attain the same degree of achievement but by means of different working-systems.

In essence, the substrata-factor theory of reading is an explanation of the development and dynamic functioning of an intellect that is trained to transform symbolic stimuli into mental processes for the purpose of associating meaning, and to manipulate these meanings by various ideational processes in order to comprehend efficiently and effectively the thoughts of another person as expressed in his writing.

## Problem

The hypothesis, derived from the substrata-factor theory of reading, which needs to be tested, is the following: development of general reading ability in grades 3 to 6 is functionally related to systematic changes in the magnitude of the elements and/or reorganization of their interrelationships in the general working-system mobilized for attaining speed and power of reading.[5] Only the data for the first part of this hypothesis has as yet been analyzed. This interim report will, therefore, be delimited to these specific problems: (a) which elements change and to what degree from grade to grade and (b) whether boys and girls at each grade level differ significantly in the functions measured in this study.

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[5] Harry Singer. *An Investigation of Changes Accompanying Development of General Reading Ability at the Elementary School Level.* U. S. Office of Education, Contract No. 2011, February 1, 1963 to January 31, 1965. Final report in preparation.

These problems may be formulated in terms that have greater relevance for the classroom teacher: as pupils learn to read throughout the grades, their mean scores in speed and power of reading increase each year as measured on such a test as the Gates Reading Survey or Durrell-Sullivan Reading Achievement.[6] Concomitantly during these grades, teachers instruct pupils in a variety of subskills, such as word meaning, prefixes, and syllabication, in the belief that development of such subskills will improve general reading ability; simultaneously, pupils' mental capacities mature and mental structures emerge.[7] Pupils, therefore, become increasingly able to benefit from instruction, learn at higher levels of abstraction, integrate what they have learned, and be more flexible in reading.[8]

Although teachers know what and when they teach a particular subskill, they do not know what pupils in general may, in fact, be learning, integrating, and utilizing for attaining improvemet in speed and power of reading. However, teachers tend to believe that certain subskills develop to maturity during the primary grades while other subskills continue to develop throughout the grades. For example, popular opinion among teachers maintains that pupils in general have attained maturity in word recognition abilities by the end of grade 4. This study is designed to give teachers a better understanding of which elements improve concomitantly with development of speed and power of reading, the degree to which these elements develop from grade to grade and therefore which elements to emphasize in planning instruction in reading.

## Experimental Design

A highly selected battery of variables which had precipitated as predictors in previous investigations at the elementary,[9] high school,[10] or college level,[11, 12]) were administered with necessary modifications to represent samples[13] of about 250 pupils each in grades three through six.[14] These abilities, listening comprehension, linguistic meaning, word recognition, and visual and auditory perception. Although personality, interest, and motivational variables had been included in the previous investigations, factors representing these domains either had not precipitated from the substrata analysis or tests from these domains were not psychometrically suitable for administration at the elementary school level. However, personality, interest, and motivational factors are undeniably important as determinants of speed and power of reading, particularly in individual cases and for certain subgroups.[15] [16]

tests encompassed measures of mental

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[6] In this study, *Power of Reading* is a composite of standard scores on Gates Level of Comprehension and Durrell-Sullivan Paragraph Meaning; *Speed of Reading* is a composite of standard scores on Gates Speed of Reading and Van Wagenen Rate of Comprehension.

[7] Bärbel Inhelder and Jean Piaget. *The Growth of Logical Thinking from Childhood to Adolescence.* New York: Basic Books, 1958.

[8] Frank Laycock. "The Flexibility Hypothesis in Reading and the Work of Piaget." *Challenge and Experiment in Reading*: Proceedings of the Seventh Annual Conference of the International Reading Association. New York: Scholastic Magazines Vol. 7: 1962, pp. 241-43.

[9] Harry Singer. "Substrata-Factor Theory of Reading: Theoretical Design for Teaching Reading." *Challenge and Experiment in Reading*: Proceedings of the Seventh Annual Conference of the International Reading Association. New York: Scholastic Magazines Vol. 7, 1962, pp. 226-232.

[10] Jack A. Holmes and Harry Singer. "*Substrata-Factor Differences Underlying Reading Ability in Known Groups.* Final Report Covering Contracts No. 438, SAE-8176, and No. 538A; SAE-8660, U. S. Office of Education, 1961.

[11] Jack A. Holmes. "Factors Underlying Major Reading Disabilities at the College Level." *Genetic Psychology Monographs* 49: 3-95; 1954.

[12] The tests came from the following batteries:
D. D. Durrell, and Helen B. Sullivan. *Reading Capacity and Achievement Tests Intermediate Battery.* New York: Harcourt, Brace, and World, 1937.
Arthur I. Gates. *The Gates Reading Survey.* New York: Bureau of Publications, Teachers College, Columbia University, 1960.
Jack A. Holmes. *California Language Perception Tests.* Palo Alto: Educational Development Corporation, Revised, 1962.
J. Kwalwasser and M. L. Dykema. *Kwalwasser-Dykema Music Tests.* New York: Carl Fischer, 1930.
Harry Singer. *Lingustic Tests: A Battery for Elementary School.* Riverside: University of California, Revised, 1963. (Multilith)
L. L. Thurstone and Gwinn Thurstone. *SRA Primary Mental Abilities, Elementary Form.* Chicago: Science Research Associates, 1954.
M. J. Van Wagenen. *Diagnostic Examination of Silent Reading Abilities.* Minneapolis: 1953.

[13] In grades three, four, five, and six there were 122, 128, 140, and 76 boys and 101, 155, 122, and 83 girls, respectively.

[14] The writer wishes to express his appreciation to the Alvord Unified School District, Riverside County Superintendent of Schools Office, and to his research staff at the University of California, Riverside for participating and cooperating in this research project.

[15] Jack A. Holmes. "Emotional Factors and Reading Disabilities." *Reading Teacher* 9, 11-17; 1955.

[16] Jack A. Holmes and Harry Singer. *Substrata-Factor Differences Underlying Reading Ability in Known Groups.* Final Report Covering Contracts No. 438, SAE-8176, and No. 538A; SAE-8660, U. S. Office of Education, 1961.

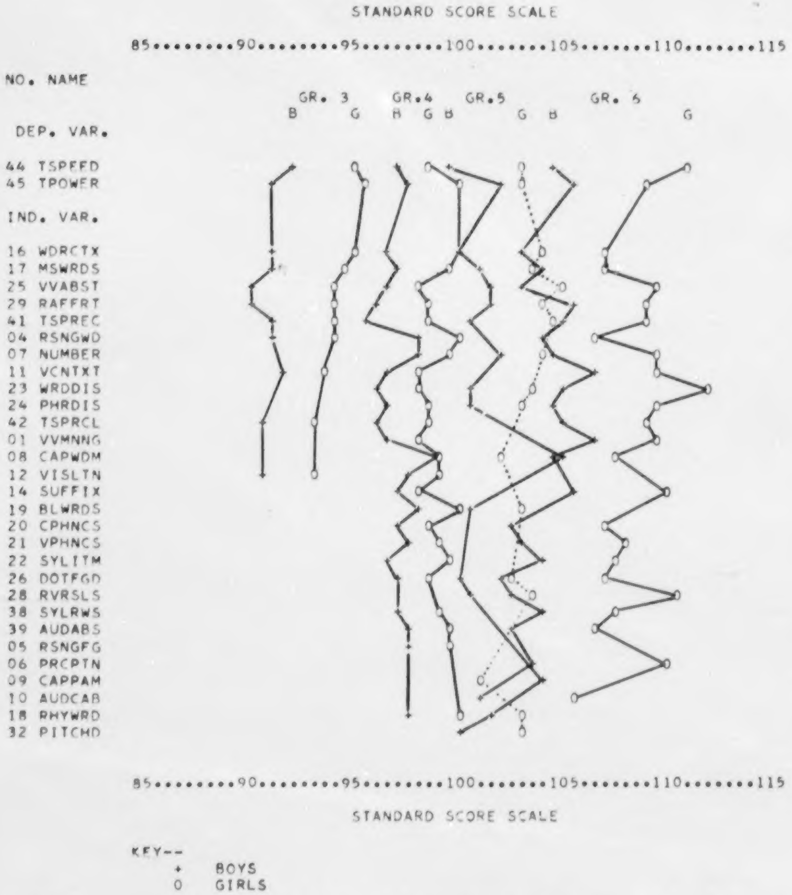

FIGURE 2. PSYCHOGRAPH OF BOYS VS GIRLS IN GRADES 3 THROUGH 6 ON MEAN STANDARD SCORES SIGNIFICANTLY DIFFERENT AT THE FIVE PER CENT LEVEL. SEE FIGURE 1 FOR VARIABLE NAMES REPRESENTED BY ACRONYMS IN FIGURE 2. OMISSION OF PLOTTED POINTS FOR A PARTICULAR VARIABLE AT ANY GRADE LEVEL INDICATES THERE WAS NO SIGNIFICANT DIFFERENCE IN MEAN STANDARD SCORES. LINES WERE PLOTTED BETWEEN POINTS, HOWEVER, TO GUIDE THE EYE OF THE READER.

## Analysis of the Data

The test data on each variable for all 927 pupils in the four grades were transformed into standard scores with a common mean of 100 and standard deviation of 10. Statistical significance of differences between means were next computed for each variable by (a) grade and (b) sex within grades.[17] Mean standard scores were then plotted on psychographs.

## Results

*Grade three vs. four vs. five vs. six.* Comparison of the psychograph for the average reader in grades three, four, five, and 6, Figure 1, reveals that in almost every variable, except for a few auditory perception variables, there is a significant increment in mean standard scores from grade to grade. Hence, a concomitant of normal improvement in speed and power

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[17] Price Stiffler performed all statistical analyses for this investigation on the IBM 7094 Computer at the University of California, Berkeley.

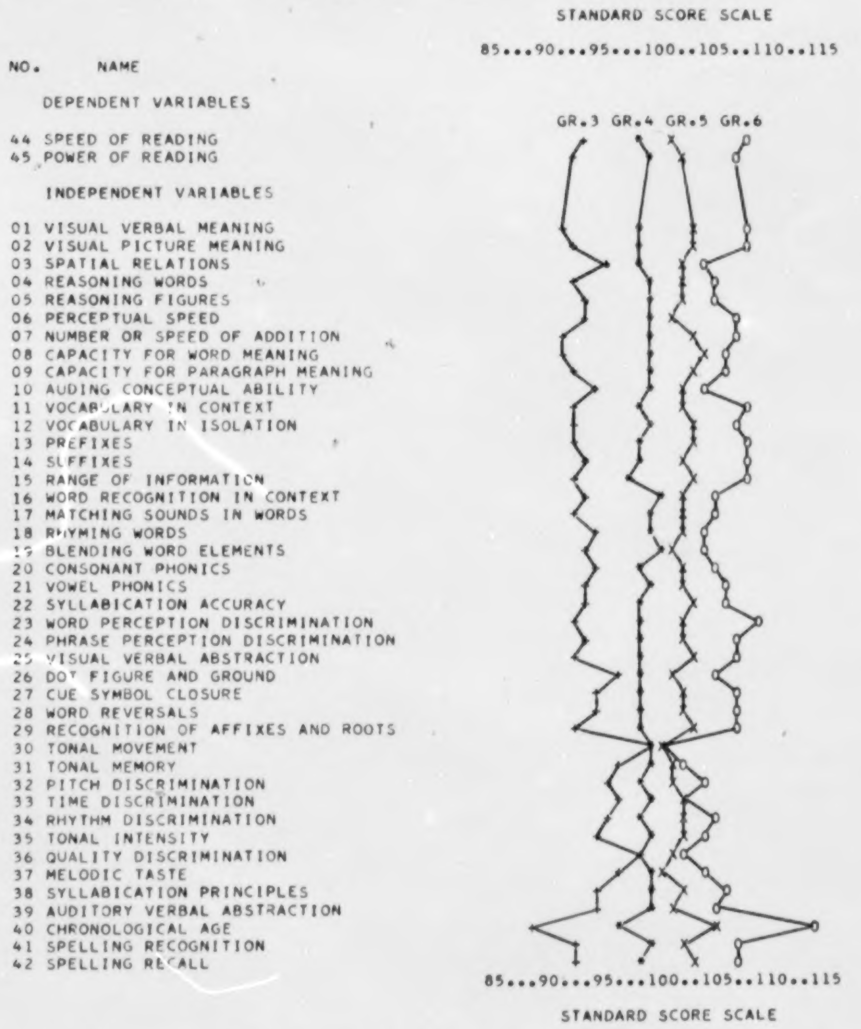

FIGURE 1. PSYCHOGRAPH OF MEAN STANDARD SCORES FOR GRADES 3, 4, 5, AND 6. ALL DIFFERENCES BETWEEN MEAN STANDARD SCORES WERE SIGNIFICANT AT THE FIVE PER CENT LEVEL, EXCEPT FOR A FEW AUDITORY PERCEPTION VARIABLES AT CERTAIN GRADE LEVEL INTERVALS.

of reading throughout the intermediate grades is a more or less uniform development of subskills and capacities. These developmental increments for the average reader may result from comprehensiveness of instruction in reading together with a generally uniform rate of cortical development and interfacilitation.

In theoretical terms, the results imply that developmental models of the general working-system of the average reader at least through the intermediate grades can be represented by quantitative increments in subskills and capacities. Such improvement in speed and power of reading may only partly depend upon the ability to mobilize subsystems composed of quantitatively superior elements. Faster and better reading during the intermediate grades may also stem from a more effective and efficient organization of subsystems and greater flexibility in mobilizing these subsystems to meet the increasingly more mature purposes of the reader and greater demands of the reading task.

However, a particular pupil's profile may vary somewhat from this relatively uniform pattern of development. Some variation in the individual's pattern may be attributable to normal interindividual and intraindividual differences in a variety of factors, such as asynchronous rates of maturation of mental functions,[18] and these factors must of course be taken into account in designing reading instruction. But, a *significant* departure from the general pattern of development suggests the necessity for an individual diagnosis to determine whether there are causal deficiencies that may be remedied.[19]

*Boys vs. Girls.* In the United States, sex differences in reading achievement consistently favor girls throughout the elementary grades.[20] Even at the reading readiness level, girls on the average score higher than boys.[21] This superiority is maintained from grades two through eight on speed, comprehension, and vocabulary.[22] But, in reading achievement at the elementary school level in Wiesbaden, Germany, boys in general are superior to girls.[23] Although current research findings seem to support an environmental explanation of sex differences in reading, the evidence is not conclusive. For example, the reading development of Wiesbaden girls could have been sufficiently retarded by differential educational treatment or cultural influences to have more than offset any potentially superior biological tendency or rapidity in maturational rate.

Previous investigations have only been concerned with relating causal determinants of sex differences to the criterion measures, speed or power of reading. The question posed for this study is whether such causal determinants, whatever they may be, uniformly or differentially influence development of subskills and capacities that are related to speed and power of reading. To answer this question, boys and girls within each grade level were contrasted on each variable in the test battery.

Mean standard scores on which boys and girls within a grade were significantly different at the five per cent level are depicted in the psychograph, Figure 2. Analysis of the psychograph reveals that at each grade level girls are superior to boys not only in speed and power of reading, but also in many other variables. From grade three through six, there is a tendency towards an increase in the magnitude of differences and in the number of variables on which the sexes differ significantly. At the third grade level, girls are already superior to boys in word recognition, word meaning, and word reasoning variables. Fourth grade girls are not only superior to fifth grade boys on many more variables, but are almost up to fifth grade boys in speed and power of reading. This differential rate of development in reading then appears to accelerate for speed of reading for grades three to six. Although fifth grade girls only approach sixth grade boys in speed and power of reading, their psychograph patterns are quite similar! At the sixth grade level, the mean differences for boys vs. girls in speed and power of reading are greater than at the previous grade levels.

Similarity in psychographs for boys and girls, particularly for fifth grade girls and sixth grade boys whose mean speed and power of reading are almost equal, suggests that the relatively superior progress of girls is not related to differential development of subskills and capacities. Whatever may be the causal determinants of sex differences in reading, they seem to exert their influence after the third grade more or less equally in the domains investigated in this study.

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[18] Nancy Bayley. "Consistency and Variability in the Growth of Intelligence from Birth to Eighteen Years." *Journal of Genetic Psychology* 75: 165-196; 1949.

[19] Harry Singer. "Substrata-Factor Theory of Reading: Theoretical Design for Teaching Reading." *Challenge and Experiment in Reading*: Proceedings of the Seventh Annual Conference of the International Reading Association. New York: Scholastic Magazines Vol. 7, 1962, pp. 226-232.

[20] Jack A. Holmes and Harry Singer. "Theoretical Models and Trends Toward More Basic Research in Reading." *Review of Educational Research* Vol. 34: April 1964. (In Press)

[21] Irving H. Balow. "Sex Differences in First Grade Reading." *Elementary English* 40: 303-306, 320; March 1963.

[22] Arthur I. Gates. "Sex Differences in Reading Ability." *Elementary School Journal* 61: 431-34; May 1961.

[23] Ralph C. Preston. "Reading Achievement of German and American Children." *School and Society* 90: 350-54, October 20, 1962.

Although separate analyses for boys and girls are necessitated by differences in their general rate of development in reading, teachers should be cautioned lest they generalize these sex differences in reading to all boys or to all girls. There is, of course, considerable variability and overlap for boys and girls in general reading ability.

### Conclusions

The general working-system for speed and power of reading develops somewhat equally in magnitude throughout grades three to six for the average reader. But, the psychograph for girls is more mature than for boys at the third grade level and tends to accelerate through the intermediate grades, particularly in speed of reading. Whatever causal factors influence sex differences in reading, their influence seems to have been somewhat equal in the psychograph of the average girl in grades three through six. However, variations within each psychograph and differences between rates of development for boys and girls will necessitate separate analyses in determining developmental changes in substrata-factor organizations for speed and power of reading.

## C. COLLEGE READING ASSOCIATION

### 1. Academic Faculty Members' Attitudes Toward College Reading and Study Programs

CLAY KETCHAM

MANY of my colleagues who teach reading and study skills courses in college frequently appear somewhat apologetic about their courses in the presence of members of the faculty in other academic disciplines. Perhaps, there are some justifications for this apologetic attitude. Of course, in most colleges, reading and study courses are extra-curricular, carry no credit, are frequently held at such odd places on the campus as the infirmary, the basement of administration buildings, near the rat laboratory in psychology buildings, and the like. In spite of these somewhat external factors which militate against a satisfactory status for reading and study skills courses in the college setting, it appears that such courses have achieved a high status in some colleges.

To determine the way college reading and study skills courses are viewed by members of the academic faculty, I prepared a questionnaire to be distributed in Pennsylvania. The questionnaire included a simple check list of the following questions: (1) What is the type and size of institution? (2) Do you refer students to a reading and study skills course? (3) What type of student do you refer? (4) Do you feel that the course helps the students referred? (5) What do the students seem to gain from the course? Space was allowed for additional comments. There was space for the department to be stated, but the questionnaire did not need to be signed. These questionnaires were given to reading personnel at randomly chosen colleges and were distributed to various members of the faculty who were asked to give the questionnaires to representative faculty without reference to whether they favored the reading program or not.

Of the one hundred questionnaires distributed, seventy-two were returned. Of these, nine were returned from private colleges and sixty-three from public colleges. All were from colleges with more than one thousand students. Every questionnaire returned indicated that the respondent believed that a reading and study course belongs in college—with nine stipulating that these courses should be developmental, not corrective. Of the sixteen different departments represented, all but two—Mathematics and Journalism—refer students to the reading and study skills course. Every one reporting referred below average students for help; however 50 per cent of those reporting also refer average and above average students for help. Of those reporting, 94 per cent stated that students referred were helped. The other 6 per cent stated that students were helped sometimes. On the type of gains made, all reported gains in reading comprehension and study skills; 66⅔ per cent also reported gains in reading speed, whereas another 66⅔ per cent reported gains in confidence.

From this admittedly very small sample of opinions from our colleagues in other academic disciplines, we can at least learn that some view our work as necessary and worthwhile at the college level. We must not conclude, however, that this view is as unanimous as the questionnaire would suggest. Generally, people who are willing to take time to answer such a questionnaire are biased in favor of the topic under consideration. Also because of the manner of distribution, in spite of admonitions to the contrary, quite possibly a biased group was chosen to answer the questionnaire. Even with these reservations, however, the results of the questionnaire do imply that, at least with some of our colleagues, our image is good. This would suggest that we stop being apologetic about our work, and know that even as we believe in the value of what we are doing, so do some of our colleagues in other disciplines.

## 2. Viewpoints of the College Reading Program from the Administrative Point of View

ROBERT C. AUKERMAN

THE COLLEGE reading program is but one of the scores of various services current on most large college and university campuses—each competing for funds, personnel, space, equipment, and recognition of its own particular indispensable worth.

Having been in college administration for twelve years, six as dean of instruction and six as director of summer session, I have had close contact with the administrative mind at work; and I can say for certain that the chief administrator of our colleges is remarkably well informed on the operation of his college, even knowledgable concerning the reading program. Only by being informed concerning the myriad details of his college can he keep things in proper perspective in the approval of current funds, personnel, space, and equipment—and in the integration of future plans for the reading program in terms of the continued projected expansion of the total institution.

This report is based upon the results of an opinionnaire sent to the presidents of 300 state colleges and universities. In spite of their already-overcrowded time, they responded magnificently with over 200 usable replies.

Twenty-five per cent reported that they DO NOT have reading programs. This is not surprising; as a matter of fact it is surprising that seventy-five per cent DO HAVE reading programs. To be sure, some are only in the neonate stage, some in their infancy, and some on the brink of survival. This report, therefore, is based upon 138 usable replies from college presidents who stated that their colleges and universities do have programs, and who filled out their replies personally. Not included in this report are those who are "just thinking" about establishing programs, or those who have "just established" programs and have not yet formulated opinions concerning them. The 138 colleges represent institutions in all of the 48 mainland states—none from Hawaii or Alaska.

The chief administrators were first asked, "Do you think that the reading program in your college is necessary?" The "Yes" answer was almost unanimous. The three who marked the question "No" took time to express their opinions that college students should arrive prepared to do college work. One, referring to a remedial program, wrote, "We are dropping instruction for weak sisters and boobs who aren't academically capable. . . . The program only prolongs the agony."

There was almost unanimous agreement that the college reading program is worth what it costs—which was the question next asked. One president stated that he felt its worth could be measured only in terms of the use that students make of it.

The third question evoked considerable hesitation on the part of college presidents. They were asked: "Do you think that the reading program in your college produces significantly improved academic achievement for those who take the program?" Although 114 said "Yes," many qualified their answers with the statement that they have absolutely no definitive figures that would support such an opinion.

Finally, in the first section they were asked whether they thought their program should be expanded, curtailed, retained as is, or eliminated. Eighty per cent replied that the program should be expanded, and about sixteen per cent thought that their programs were just about right "as is." Two expressed the opinion that the program should be curtailed; and, of course, the three who said "No" to question number one were consistent in voting to eliminate the program. Some expressed the usual administrative qualifications that expansion would be contingent upon appropriations.

Fifty-two presidents said their programs are remedial; fifty-seven thought they are more developmental; and twenty-three said they are both. They seemed satisfied that, regardless of the type of program they have, it is essential and should be expanded.

The great majority of the presidents believe that the program should be financed out of general funds and that the students who benefit from the program should not be expected to pay for it.

Although about seventy-five per cent expressed the opinion that the faculty of their college or university supported the program, there were quite a number of qualifications, representative of the uncertainty of the fact that perhaps support is only minimal. Some thought only the faculty who knew about the program supported it. About twenty-five per cent felt that the faculty as a whole ignored the program. Only one president expressed the opinion that the faculty resented the program.

When asked whether or not they would support the continuance of the program (if it came to a showdown with the Board of Trustees), 120 said they could, but only 87 said they would. About half the presidents said they could support expansion of the program, although earlier 108 said the program should be expanded, and only 60 would risk a showdown. There are many practical considerations, of course, for, actually, a president could be personally convinced that the reading program is not only necessary and that it should be expanded but a financial showdown with the Board might pose a threat to the entire overall program of the college. Moreover, as one administrator stated: Assuming that the specific educational program is within the broad policies of the University and does not do violence to the broad objectives of the Board of Regents and the University proper, the justification for its existence is a faculty and administrative concern and would be justified on that basis.

Finally, when asked, "In what ways might the reading program in your college be strengthened,"? many answers illustrated the need for expanded facilities, more trained personnel, smaller classes for remedial work, and more encouragement from faculty and advisers for able students to enroll in the developmental courses. Several expressed the desire that entering freshmen whose entrance tests reveal deficiencies in reading should be programed into compulsory remedial sections.

Several conclusions from this survey are pertinent both to college administrators and to directors of college reading programs. First, it is quite apparent that top college administrators are committed to such programs and would support their continuance. It is most important, secondly, that those who are responsible for college reading programs develop some means of obtaining substantive data which supply definitive answers to the question as to whether or not the programs are effective and produce significant academic gains. This is the one weak spot. Such data would be of added significance when one studies the third conclusion, namely, that faculty support is lukewarm chiefly because the faculty is not convinced of the value of the program. Fourth, for the reading profession as a whole, the study focuses on the need for more adequately trained personnel to be made available immediately for the scores of positions that need to be filled.

## 3. Some Aspects of the College Reading Program: A Student's View

EDWARD J. NEREN

THE COLLEGE reading program can be considered from the standpoint of the purposes of three types of students. First is the good student, aiming to achieve increased reading speed, comprehension, and efficiency. Second is the fair or average student concerned with the same areas of improvement. The poor student, lastly, works toward achievement in these areas, but consideration of several other influencing factors is often necessary.

This paper is concerned with the problems of the poor students and the ways in which they can improve academically with the help of the reading program.

Students can be introduced to the reading clinic as the result of previous testing in high school, college, or by private services. The suggestion of an alert faculty member may be influential; or the student himself may have observed the potential value of this program among friends or acquaintances.

Once in the program, the student is confronted with several obstacles to improvement. The first is the student's own attitude. He may accept the fact that help is needed or he may be hostile to one or all of the following: the word "clinic," the idea of a special class without college credit, having a deficiency when in college, or just fear of inadequacy that has developed within. The second obstacle is the determination of his individual areas of deficiency or weakness. This is accomplished with evaluation conducted in class in the areas of reading speed and comprehension, plus note-taking organization where relevant (including legibility, spelling, spacing). Initial resentment can develop when the student is faced with the unpleasant realization that he or she cannot perform at a level above which the student has considered himself competent. Referrals for possible physiological problems (sight, hearing, speech) occasionally may be required, as may be referrals for psychological problems. The latter may take the form of an integrated program with the psychology department, a psychiatrist, or a counseling adviser. The reading instructor must continually be alert to the possibility of such related student needs.

Once the deficiencies or weaknesses are known to the reading instructor and to the student, a program can be developed in the reading class that will produce maximum improvement in the shortest time. This is important because achievement reduces fear of inadequacy within the student and the tendency to drop out of the program, while building confidence in himself. An attachment develops among students having similar problems as the class progresses, which also helps. The basic skills required for general improvement in the program can be dealt with in the first half of the semester. The second half of the semester can be devoted to diversified developmental reading and study approaches in different subjects, and extended concentration on individual student problems.

It is important that the student develop a personal schedule that is reasonable and effective. This schedule should provide for an average of about two hours study time per hour of class and a weekly review. Suggestions for note-taking and outlining subject material should be developed, stressed, and practiced. The reading class should also provide example examinations and analysis of examinations in varied subjects so that students can practice examination conditions where this has been a difficulty.

Several aids for the instruction of students can be developed. The first is a color coding system for exercise answer sheets used with the various source materials, where many are involved. This makes for more efficient use of valuable class time. Each student should keep his own file containing exercise answer sheets and other pertinent class material. In this way, the student is constantly aware of the nature and rate of his progress. An additional motivational factor would be the awarding of at least a single college credit for participating effectively in such a program.

It is most important that the problem be determined, an individual plan of improvement developed, and that the student be able to see his improvement.

# D. NATIONAL COUNCIL OF TEACHERS OF ENGLISH

## 1. Reading Skills in Teaching Literature in the Elementary School

WILLIAM A. JENKINS

WHAT ARE vital reading skills that must be considered when teaching literature in the elementary school? I think the list is as comprehensive as our knowledge of reading. However, let me highlight some basic ones.

First of all, I believe that as a child learns to read and increases his power to read, he must be taught to interpret life in varying degrees of seriousness, whether through skimming or through reflective reading. Just as the contexts of literature can be varied widely to teach words and phrases, they can be varied widely for depicting man and his concerns.

A child should be taught that language has nuances, subtleties, and intricacies. He should learn to recognize these and to understand how they create differences in the author's intent and effect. Only wide and varied types of reading can fully accomplish this objective.

A child should be taught to interpret a wide range of vocabulary and discourse, even in dialect. Again, only a wide acquaintance with books, authors, themes, plots, and styles can accomplish this aim. Least effective are the readers set in middle-class or suburban environments with children who never cheat or steal; who do not have to fight for life, sustenance, and recognition; who are never frustrated, thwarted, or defeated; who never seemingly encounter parental tyranny, yellow, red, or black skins; who do not know poverty, squalor, hunger, or fatigue. They do know these—only they know them outside of their books. Out of school they frequently have experienced these and even more impressive facts of life—a younger sister dying of starvation, as recently happened in Kansas City to a child who was regularly given breakfast at school. When this happened, he could no longer eat. He lost his appetite! Knowledge of fathers who communicate only when in a drunken stupor, as Charlotte Brooks has vividly described in her pictures of the culturally disadvantaged in Washington, D. C.

A child needs to be taught to pursue a series of events in order of time. Stories should do this for him.

He must be taught to grasp the tone and mood of a reading selection. Again wide reading will provide the opportunities. This includes being read to, and reading connected discourse aloud.

A child must, of course, be taught comprehension of both the main idea and pertinent details. Practice in this is readily provided by stories which have a skeleton of plot that can be stripped away and to which details can be readily fastened and pegged.

In reading in the elementary school a child must be taught to use pictorial aids to meaning. Readers and trade books both afford opportunities for developing this skill, but in my experience teachers too seldom seize the chance or use it at its maximum.

A child must be taught to make generalizations from the specific instances he encounters in reading, and he must learn to become emotionally involved through characters and events which he encounters in his reading.

With limitations, a child must learn to recognize and understand the figures and other esthetic elements he encounters in his reading. I say with limitations, because here, too, our notions are being questioned. Many teachers at all levels have assumed that in a child's early reading of myths, folk tales, Bible stories, and so forth, he builds a foundation of allusion upon which later literary experiences will rest. A study being conducted by Dr. James Squire, NCTE Executive Secretary, to be published some time this year, may change our position. Based on an analysis of fifty anthologies, Dr. Squire's study tentatively has found that upper grade children *do* need a background knowledge of the Greek myths (particularly the Trojan War); and of the Arthurian cycle. More allusions refer to Arthur and his Knights than to all other figures in British and American folklore combined. The study has found also that children need a knowledge of Bible stories of the Old Testament. Of less importance, according to this study, are the Norse myths, stories of the Far East, American folk tales, and English balladry.[3]

A final reading skill area in teaching literature in the elementary school must be vocabulary. In young children vocabulary grows through finding the best word to share experience. Their language development evolves as they move from egocentric concerns to the group life of school and as their teacher takes them beyond themselves in both reading and non-reading activities. For older children, the quickest way to climb the reading vocabulary ladder is to read widely in books which are exciting or personally meaningful.

## 2. Reading Skills in the Study of Literature in the Junior High School

MARGARET EARLY

THE TEACHER of literature in the junior high school, like his colleagues in history, science, and mathematics, is responsible for teaching reading skills which are especially appropriate to his subject. Unlike his colleagues, however, the teacher of literature is sometimes unsure of what his subject is.

The subject-matter of the junior high school teacher of literature I would venture to define as an understanding of what literature is; that is, an understanding of what fiction, poetry, and drama do to you, and how they do it. This subject-matter can be learned only through experience. Definitions of literature—the answers given by poets and critics to the questions of what it is, and what it does to you, and how it does it—may illuminate experience. A definition of poetry has meaning only if the reader can say, "Oh, yes, that's the way it is; this is what I knew, but he has put it into words for me."

So, in the junior high school, we teach what literature is. We can do this only if we know, or are on the way to finding out, what it is ourselves.[1]

Like our colleagues then, we, too, have a "subject"—something to be learned. And on the other side of the paradigm we have young adolescents, who are already, like Tennyson's Ulysses, a part of all that they have met. Teaching mediates between these two, of course, but one of our goals is to help children to get along without us. Reading skills also mediate between the learner and literature. Knowing how to read, and specifically how to read literature, the student can go on discovering the varieties and delights of literary experience for the rest of his life, without the aid of the teacher.

This is very optimistic, this hope that we can teach the reading skills for experiencing literature so well that students will be able to use these skills independently. I am not so sure that we know how. What little research we have points more to our failures than our successes.[2,3,4,5] From these studies, we learn that students who misinterpret poetry and fiction fail to make out the plain sense of the selection; they allow personal experiences to intrude and pervert the author's meaning; they conceal lack of genuine response by using stock critical phrases; they are insensitive to the human condition, at least as it is portrayed in words; and they are blinded by preconceived notions.[6] Frequently they make moral judgments that reveal their failure to distinguish between life and literature. Conversely, good readers search for meaning; they suspend judgment; they weigh evidence, judge details objectively, and maintain esthetic distance; they react honestly; they respond emotionally but at the same time they are interested in how literary effects are achieved.[7]

It seems probable that instruction in literature as much as the development of reading skills will produce positive traits and inhibit negative ones, but we have no experimental evidence that the "right" responses are directly attributable to specific teaching methods. Assuredly, many more factors influence readers' responses to literature than the simple practices which I shall suggest for teaching a few reading skills.

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[3] James E. Squire, "Reading and the Language Arts: A Probe into the Future," in *Reading and the Language Arts*, edited by H. Alan Robinson. Chicago: The University of Chicago Press, 1963, pp. 204-212.

[1] See Northrop Frye. *The Educated Imagination*. Toronto: Canadian Broadcasting Corporation, 1963.

[2] Walter Loban. *Literature and Social Sensitivity*. Champaign, Illinois: National Council of Teachers of English, 1954.

[3] I. A. Richards. *Practical Criticism*. New York: Harcourt, Brace, and Co., 1929.

[4] James R. Squire. *The Responses of Adolescents While Reading Four Short Stories*. Champaign, Illinois: National Council of Teachers of English, 1963.

[5] James R. Wilson. "Responses of College Freshmen to Three Novels." Doctoral dissertation, University of California, Berkeley, 1962.

[6] Richards, *op. cit.*

[7] Squire, *op. cit.*

## Exploring Students' Background

Before rushing in with a list of "how to do it" recipes, however, we should consider what junior high school youth bring to a study of literature. This is a question that you can answer for a given group of students by studying their reading achievement, as revealed by standardized test scores, and reviewing their literature program in preceding grades. Study of the teachers' editions of basal texts and literary readers will show you that your students have been exposed to such skills as interpreting figurative language, visualizing settings and characters, drawing inferences, understanding dialogue, recognizing mood and atmosphere, style and tone.

By administering informal tests you can see for yourself how much of this instruction has taken hold. As one test, you might select several examples of figurative language, like "his flaming beard" or "hair like a dandelion gone to seed," and ask students to identify the two parts of the comparison and the quality shared by each. For another test, you might take allusions from the literary selections you will teach. If an allusion is presented in context, students may be asked to explain the meaning, even if the origin of the phrase is unknown. A typical item: "Clearing the jungle required Herculean efforts." Skills exercises to be described later may also be used as pre-tests.

Because informal tests concentrate many examples of a single skill in each sub-test, they yield estimates of students' abilities more rapidly and systematically than do incidental observations made while teaching. Moreover, they are more analytical than standardized tests. Both kinds of testing are helpful, however, and neither kind is a substitute for sensitive observations.

Individuals bring different kinds of life experiences to the reading of literature; their elementary school backgrounds vary widely, too. But for the purposes of this discussion, we must risk a few generalizations.

In this abundant era, youngsters have had more experiences, real and vicarious, than they can sort out. We have talked a great deal about impoverished experience background as an impediment to successful reading; but failures in reading literature are caused also by intrusion of irrelevant or unexamined personal experiences. A teacher who had read *Light in the Forest* with a combined fourth grade and eighth grade observed that the younger children seemed to bring just enough meaning to Richter's images to see them sharply and clearly, whereas the older children wanted to introduce ideas that were not in the author's plan. In reading literature, this teacher remarks, where everything readers need to know about the writer's idea is in the story, it is a great advantage not to carry the burden of excess and irrelevant detail. Derived from the New Criticism, this is an overstatement, but it reminds us that good teaching of literature directs discussion toward the text, not away from it.

Many children may bring with them into junior high an appreciation of literature that is superior to their skill in reading it. Elementary teachers may have good literature to children and developed fairly sophisticated critical reactions by exploring in child-like thought patterns the ways in which poets and tellers of tales achieve certain effects. Outside of school, too, children pick up ideas that are useful in understanding literature. Tutored by television, today's children may be more sophisticated in spotting stereotypes than were the fans of Elsie Dinsmore and Horatio Alger.

## Selecting Skills for Emphasis

All we ask of the elementary literature program, however, is that children learn to enjoy imaginative writing. We don't demand articulate reasons for their pleasure, though some children may be able to give them. We would hope that they have learned to read well enough to experience pleasure through reading even though they choose to read trash. So long as students read voluntarily, even though indiscriminately, junior high school teachers have the necessary base on which to develop reading skills that facilitate appreciation.

### Skills to Be Emphasized

Burton has described a hierarchy of skills comprised of three sets of abilities: first, those needed for "imaginative entry" into a work of literature; second, those needed for perception of meaning or central purpose; third, those needed for perception of artistic unity and significance.[8] This is a "hierarchy" in the sense that perception of meaning cannot precede "imaginative entry." It is not a scheme for teaching one set of abilities in junior high, another in grades 11 and 12. Individual readers at any grade level may accomplish the whole cycle which Burton has delineated, the fourth grader achieving imaginative entry, perception of central purpose, and of artistic unity as he studies *Freddy the Detective,* the twelfth grader as he studies *Animal Farm.* I find Burton's scheme a useful one, but not for the allocation of skills. I cannot name reading skills for junior high school which I would not also teach in fourth grade and twelfth. Differences lie in the methods of teaching—how deeply we probe, what refinements we strive for—and in the subtlety and complexity of the works of art that are studied.

The skills that I believe are worthy of direct and intensive instruction in the junior high school facilitate one or the other of Burton's "sets of abilities." I would advocate teaching these skills emphatically, through demonstration, discussion, and practice exercises, as well as incidentally through reiterated application reading whole works of literature. Although I am aware of the dangers of out-of-context skills exercises, I would argue for them because, in teaching a whole literary selection, we frequently pay scant attention to sub-skills in order to focus on larger purposes. Moreover, the careful analysis needed in developing these skills may be accomplished in exercises without endangering the impact of a major selection. We want students to read straight through a short novel like *Shane,* getting the structure of the whole. But the first reading should be an accurate one. If the student has been taught to note details of setting, characterization, and action (and if the readability level is appropriate to his general reading achievement), he will get the plain sense meaning, which is essential to achieving that initial impact from which the study of literature commences.

### Clues to Setting

Thus, in a series of direct lessons, I would teach the skill of noting clues to time and place. I might take the opening paragraph or two from several short stories and novels and present these for analysis of the details which indicate setting. Such a series of lessons would teach also the process of hypothesizing, weighing new evidence, rejecting hunches, and reformulating an hypothesis. (Applied first to the simpler task of locating the scene, hypothesizing will be necessary, too, in studying character, plot devices such as foreshadowing, and mood or tone.) I propose a series of lessons moving from straightforward statements to subtle evocations of time and place such as we find in Poe's short stories and in the compressed language of poetry. As a culmination to such a series, I might read to the class Stephen Vincent Benet's short story, "By the Waters of Babylon" (New York City in the dread future following total atomic war), pausing at intervals to check guesses to time and place.

### Clues in Studying Characters

Similarly, clues to characterization may be taught directly through a series of short passages extracted from fiction. What can you learn of a character's age, sex, nationality, education, attitudes, etc., from the way he talks? An easier exercise would focus on externals, a more subtle one on character traits. Ballads and other narrative poems are especially effective media for exercising the skill of drawing inferences. One example is Roy Helton's "Old Christmas," which tells (in dialogue only) a macabre ghost story.

Careful reading to note details is as important in studying literature as it is in mathematics. I would encourage students to do so by demonstrating the satisfactions to be derived from close reading, not by threatening them with quizzes that demand the recall of detail.

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[8] Dwight L. Burton. "Teaching Students to Read Literature." *Perspectives in Reading, No. 2, Reading in Secondary Schools.* Newark, Delaware: International Reading Association, pp. 87-102.

**Oral Reading**

In a recent article by a Harvard English professor,[9] "reading experts" are taken to task for neglecting oral reading. Whether or not his criticism is fair, one must agree with him on "the importance of hearing the sentence in the inner ear both for interpretation and judgment of writing." His point is similar to the recommendations of linguists who urge the values of intonation practice as an aid to comprehension. How can we develop the skill of giving to words the tone and emphasis intended by the writer? My guess is that wide reading is the best means of learning the rhythms of written language patterns. Beyond this, students may learn by listening to oral reading how written language attempts unsuccessfully to capture the meanings carried in spoken language by stress, pitch, juncture and paralinguistics.

Because the sound of poetry is an essential part of its being, teachers almost always introduce poems by reading them aloud. But do students learn how to read another poem on their own, hearing it in their inner ear? In your informal testing, you might try this: duplicate a poem, one that has a subject or theme, and ask students to read it silently, then write an explanation. The next day repeat the assignment, but this time read the poem aloud. Comparison of the two assignments should reveal those students who can handle a certain kind of poetic diction on their own, those to whom your oral interpretation disclosed meaning, and those unable to cope with the poet's ideas.

The decline of oral reading was a protest against its misuse—the unprepared, undisciplined, unnecessary reading-'round-the-room. Prepared, polished oral reading by teachers, to provide models, and by students, to train their inner ear, deserves time in the junior high program. One suggestion is to require instead of the usual book review the reading aloud of key passages. The student's choice and interpretation will be a rigorous test of his comprehension and appreciation. This use of oral reading is not a method of teaching. The teacher teaches and the student learns as they work together in preparing for a successful interpretation.

In some classrooms, retarded readers, using a tape recorder equipped with headphones and jacks, listen as they follow the text. I am not sure how effective this may be, unless the role of the listener-reader is made more active, but it warrants a tryout. Another use of tapes might involve readers in taping their interpretation for comparison with models. An interesting sequence of oral reading skills might be devised: from straight narration and description to humor, sarcasm, and satire; from simple lyric poetry to more intricate; from monologues to many voices; from the student's own dialect to others'.

**Conclusion**

The sub-skills related to Burton's first step, "imaginative entry," are aimed chiefly at facilitating comprehension to the point where live connections between the reader and the book are possible. To be sure, they shade into another cluster of abilities that might be labeled "understanding the author's craft," although I have purposely not developed ideas for teaching the appreciation of imagery and symbolism and the selection and ordering of details. Certainly, reading skills contribute to appreciation of these essentials of the literary craft, for example, "seeing relationships" and "following the author's pattern" are skills needed in studying the structure of a poem or a novel.

The direct teaching of sub-skills must not be allowed to steal time from discussion of ideas, which is vital in studying literature. But in many literature classes, "discussion of ideas" is a euphemism for a kind of rapid-fire question-answer session in which the teacher imitates a screenland district attorney. Or it is a discussion that rambles off into teen-age problems, leaving literature far behind. From the time wasted in these ways there could be salvaged a modest amount for the development of skills.

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[9] Reuben A. Brower, "Book Reading and the Reading of Books," *Daedalus*, 5-20, Winter, 1963.

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